# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



DIVISION SIX / DISTRICT TWO

## **CONTRACT PROPOSAL**

WORK ORDER NUMBERS: 6.102640, 6.102620, 6.202611, 6.202621, 6.104340, 6.104320,

6.204311, & 6.204321

ROUTES: <u>Varies</u> COUNTIES: <u>Cumberland and Harnett</u>

DESCRIPTION: Guardrail/Guiderail/Fence Installation and Maintenance Contract

BID OPENING: December 18, 2013

#### NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD OR SBE PROJECT. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA.

NAME OF BIDDER	N.C. CONTRACTOR'S LICENSE NUMBER
ADDRESS OF BIDDER	

RETURN BIDS TO: Mr. Tom Hay, Proposal Engineer
Department of Transportation
P. O. Box 1150
Fayetteville, North Carolina 28302

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#### **INSTRUCTIONS TO BIDDERS**

## PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

- 1. The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner. "DO NOT SEPARATE THE BID SHEET FROM THE PROPOSAL!"
- 2. All entries on the bid sheet, including signatures, shall be written in ink.
- **3.** The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures.
- **4.** An amount bid shall be entered on the bid sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the sheet
- **5.** The total amount bid shall be written in figures in the proper place on the bid sheet. The total amount shall be determined by adding the amounts bid for each item.
- **6.** Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink.
- 7. The bid shall be properly executed. All bids shall show the following information:
  - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
  - b. Name of individual or representative submitting bid and position or title.
  - c. Name, signature, and position or title of witness.
  - d. Federal Identification Number
  - e. Contractor's License Number
- 8 Bids submitted by corporations shall bear the seal of the corporation
- 9. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- **10.** The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 11. THE PROPOSAL WITH THE BID SHEET STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE DIVISION PROPOSALS ENGINEER'S OFFICE AT 558 GILLESPIE STREET, FAYETTEVILLE, NORTH CAROLINA 28302 BY 10:00 AM ON DECEMBER 18, 2013.
- 12. The sealed bid must display the following statement on the front of the sealed envelope:

#### "Bid for Guardrail/Guiderail/Fence Installation and Maintenance (026 & 043) - 12/18/2013"

**13.** If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

MR. TOM HAY, PROPOSALS ENGINEER NCDOT P.O. BOX 1150 FAYETTEVILLE. NORTH CAROLINA 28302

#### **AWARD OF CONTRACT**

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (excluding 102-2 and 102-11) of the <u>Standard Specifications for Roads and Structures 2012</u>. The lowest responsible will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject all bids.

# DIVISION CONTRACT General Provisions

#### **GENERAL**

This contract is for Guardrail/Guiderail/Fence installation and maintenance on Interstate, Primary, and Secondary Routes in Cumberland and Harnett Counties.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the North Carolina Department of Transportation Standard Specifications for Roads and Structures 2012, the North Carolina Department of Transportation Roadway Standards Drawings, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD) or as directed by the Engineer.

The Contractor shall keep himself fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the <u>Standard Specifications</u>.

The contractor shall coordinate all work with the Department. A pre-construction conference shall be held prior to beginning work.

#### PREQUALIFICATION TO BID ON POC'S

Beginning July 1, 2009, any firm that wishes to perform work on Division Purchase Order Contracts as either the prime contractor or as a subcontractor on the project must be prequalified for the type of work they wish to perform. Firms that wish to bid on these projects as the prime contractor must be prequalified prior to submitting a bid. Firms that wish to perform as a subcontractor to the prime contractor must be prequalified prior to beginning work on the project.

For the purposes of prequalification, any firm that is currently prequalified as a prime or a subcontractor on central let projects for the appropriate work codes is considered eligible to work and/or bid on Purchase Order Contracts as long as other items such as bonding and license requirements for the contract are met.

Information regarding the requirements to become prequalified as a Purchase Order Contract contractor, including the application to become prequalified if you are not already prequalified, can be found at the following website: <a href="http://www.ncdot.org/business/howtogetstarted/">http://www.ncdot.org/business/howtogetstarted/</a>

#### **AUTHORITY OF THE ENGINEER**

The Engineer for this project shall be the Division Engineer, Division Six, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representatives. The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to enforce and make effective such decisions and orders as the Contractor fails to carry out promptly. The District Engineer for this project is Mr. Lee R. Hines, Jr. (Richie), PE.

#### DISTRICT CONTACTS

Upon award of the contract, the District contact will be Mr. Earl C. Locklear (Engineering Technician)

► Telephone: (910) 486-1496 ► Email: elocklear@ncdot.gov

or
Mr. Troy L. Baker (Assistant District Engineer)

► Telephone: (910) 486-1496 ► Email: tlbaker@ncdot.gov

#### BIDS

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds **\$1,200,000**, the bid will not be considered for award. In addition, a bid tabulation will not be posted or distributed until after the project has been awarded. Also, if the project is not awarded, a bid tabulation will not be posted or distributed.

#### PROSECUTION AND PROGRESS

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods of construction as may be required to complete the work described in the contract by the completion date and in accordance with Section 108 of the <u>Standard Specifications</u>.

The Contractor's operations are normally restricted to daylight hours. Night work may be allowed on a case by case basis as deemed necessary, pending approval by the Engineer. No work may be performed on Sundays and/or legal State holidays. Work shall only be performed when weather and visibility conditions allow safe operations or as directed by the Engineer.

The Contractor shall temporarily remove his equipment from the travel way for emergency vehicles and school buses as directed by the Engineer.

#### **BANKRUPTCY**

The Department of Transportation, at its option, may terminate the contract upon filing by the Contractor of any petition for protection under the provisions of the Federal Bankruptcy Act.

#### CONTRACT TIME AND LIQUIDATED DAMAGES

(7-1-95)(Rev. 12-18-07)

SP1 G10

THE DATE OF AVAILABILTY FOR THIS PROJECT IS MONDAY, JANUARY 27, 2014.

THE COMPLETION DATE FOR THIS PROJECT IS ONE YEAR FROM THE DATE OF AVAILABILTY FOR THIS PROJECT. THE FINAL INVOICE SHALL BE RECEIVED IN THE DISTRICT ENGINEER'S OFFICE WITHIN ONE (1) WEEK OF THE COMPLETION DATE.

No extensions will be authorized except as authorized by Article 108-10 of the Standard Specifications.

The Contractor may begin work prior to this date upon approval of the Engineer or his duly authorized representative. If such approval is given, and the Contractor begins work prior to the date of availability, the Department of Transportation will assume no responsibility for any delays caused prior to the date of availability by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date. No work will be permitted and no purchase order will be issued until all required bonds and pre-requisite conditions and certifications have been satisfied.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are Five Hundred Dollars (\$500.00) per calendar day.

#### TEMPORARY SUSPENSION OF WORK

In accordance with Article 108-7 of the <u>Standard Specifications</u>, the Engineer will have the authority to suspend the work wholly or in part, any written order for such periods as he may deem necessary for any of the following reasons.

- 1. Conditions considered unfavorable for the suitable prosecution of the work, or
- 2. The Contractor's failure for correct conditions unsafe for workmen or the general public, or
- 3. The Contractor has not carried out orders given to him by the Engineer, or
- 4. The Contractor's failure to perform any provisions of the contract.

No extension of the completion date will be allowed for the above suspensions except as may be provided for in Article 108-10

#### INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures, narrowing lanes, detaining and/or altering the traffic flow and restoring to a two-lane, two-way traffic pattern. These provisions shall be adhered to from the beginning of the project through project completion. The Engineer can adjust the time restrictions as necessary. The following times are restricted:

#### **INTERSTATE 95 & FUTURE INTERSTATE 295**

#### LANE CLOSURE TIME RESTRICTIONS

Travel lanes shall not be closed or narrowed between the hours of 6:00 AM and 9:00 AM or between the hours of 4:00PM and 7:00 PM Monday through Thursday. Travel lanes shall not be closed or narrowed from 4:00 pm on Thursday through 8:00 am on Monday.

#### ROAD CLOSURES ARE NOT PERMITTED AT ANY TIME.

#### **ALL OTHER STATE MAINTAINED ROUTES**

#### LANE CLOSURE TIME RESTRICTIONS

Travel lanes shall not be closed or narrowed between the hours of 6:00 am and 9:00 am Monday through Friday. Travel lanes shall not be closed or narrowed between the hours of 4:00 pm and 7:00 pm Monday through Friday.

#### ROAD CLOSURES ARE NOT PERMITTED AT ANY TIME.

In addition, the Contractor shall not narrow or close a lane of traffic on **ANY STATE MAINTAINED ROUTE**, detain and /or alter the traffic flow on or during holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

#### HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

- 1. For unexpected occurrence that creates unusually high traffic volumes, as directed by the Engineer.
- 2. For **New Year's Day**, between the hours of **4:00 p.m.** December 31st and **8:30 a.m.** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until **8:30 a.m.** the following Tuesday.
- 3. For Martin Luther King, Jr. Day, between the hours of 4:00 p.m. Friday and 8:30 a.m. Tuesday.
- 4. For **Easter**, between the hours of **4:00 p.m.** Thursday and **8:30 a.m.** Monday.
- 5. For **Memorial Day**, between the hours of **4:00 p.m.** Friday and **8:30 a.m.** Tuesday.
- 6. For **Independence Day**, between the hours of **4:00 p.m.** the day before Independence Day and **8:30 a.m.** the day after Independence Day.
  - If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of **4:00 p.m.** the Thursday before Independence Day and **8:30 a.m.** the Tuesday after Independence Day.
- 7. For Labor Day, between the hours of 4:00 p.m. Friday and 8:30 a.m. Tuesday.
- 8. For Veteran's Day, between the hours of 4:00 p.m. Friday and 8:30 a.m. Tuesday.
- 9. For **Thanksgiving Day**, between the hours of **4:00 p.m.** Tuesday and **8:30 a.m.** Monday.
- 10. For **Christmas**, between the hours of **4:00 p.m.** the Friday before the week of Christmas Day and **8:30 a.m.** the following Tuesday after the week of Christmas Day.
- 11. For **NASCAR Daytona Car Races**, between the hours of **6:00 a.m.** the Friday before the week of the NASCAR Daytona Car Races to **7:00 p.m.** Monday after the week of the NASCAR Daytona Car Races.
- 12. For the **Daytona Bike Week**, between the hours of **6:00 a.m.** Friday the week before the week of the Daytona Bike Week to **7:00 p.m.** Monday after the week of the Daytona Bike week.
- 13. For the **Myrtle Beach Bike Weekend**, between the hours of **6:00 a.m.** Thursday before the week of the Myrtle Beach Bike Weekend to **7:00 p.m.** Monday after the weekend of the Myrtle Beach Bike Weekend.

Holidays and holiday weekends shall include New Year's, Martin Luther King Jr. Day, Easter, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving, Christmas, Daytona 500 Car Race, Daytona Bike Week and Myrtle Beach Bike Weekend. The Contractor shall schedule his work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

# INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES (continued)

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for daytime and nighttime lane closures according to the time restrictions listed above.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated herein and place traffic in an **existing traffic** pattern.

Any exception to the above stated times and days must be requested in writing by the Contractor to the Engineer prior to mobilization.

The liquidated damages for lane closures are **Five Hundred Dollars (\$500.00) per 15 minutes or any portion thereof.** 

#### SAFETY AND ACCIDENT PROTECTION

In accordance with Article 107-22 of the <u>Standard Specifications</u>, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

#### POSTED WEIGHT LIMITS

The Contractor's attention is directed to the fact that many primary and secondary roads and bridges are posted with weight limits less than the legal limit. The Contractor will not be allowed to exceed the posted weight limits in transporting materials or equipment to the project. The Contractor should make a thorough examination of all maps and haul routes on this project.

#### SUBLETTING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of this contract or any portion thereof; or his right, title, or interest therein; without written consent of the Engineer. Subletting of this contract or any portion of the contract shall conform to the requirements of Article of 108-6 of the Standard Specifications.

#### COORDINATION WITH OTHERS

The Contractor shall coordinate with the school personnel for possible conflicts and/or delays with school activities if the project is located within five miles of the school. All work shall be scheduled to minimize interference with all school traffic.

#### SAFETY VESTS

All Contractors' personnel, all subcontractors and their personnel, and any material suppliers and their personnel shall wear a reflective vest or outer garment conforming to the requirements of MUTCD at all times while on the project.

#### CONFORMITY WITH THE CONTRACT

The presence of the engineer or an inspector at the work site shall in no way lessen the contractor's responsibility for conformity with the provisions of this contract. Should the engineer or inspector fail to point out work that does not conform with the plans and specifications, whether from lack of discovery or for any other reason, it shall in no way prevent later rejection or correction to the unsatisfactory work when discovered. The contractor shall have no claim for losses suffered due to any necessary removals or repairs resulting from unsatisfactory work.

#### UTILITY CONFLICTS

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

The contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public.

#### SUBSURFACE INFORMATION

(7-1-95) SP1 G112 A

There is no subsurface information available on this project. The Contractor shall make his own investigation of subsurface conditions.

#### NOTIFICATION OF OPERATIONS

The Contractor shall notify the Engineer <u>5 calendar days</u> in advance of beginning work on this project. The Contractor shall give the Engineer sufficient notice of all operations for any sampling, inspection or acceptance testing required.

#### MATERIAL AND EQUIPMENT STORAGE AND PARKING

When work is not in progress, keep all personnel, equipment, machinery, tools, construction debris and supplies at least 40 ft (12.2 m) away from active travel lanes. When vehicles, equipment, and materials are protected by concrete barrier or guardrail they should be offset a minimum of 5 ft (1.5 m) from the barrier or guardrail put along rear side.

#### RESPONSIBILITY FOR DAMAGE CLAIMS

In accordance with Article 107-15 of the Standard Specifications, the Contractor shall indemnify and save harmless the Department of Transportation and its officers, agents and employees from all suits, actions, or claims of any character brought for any injury or damages received or sustained by any person, persons or property by reason of any act of the Contractor, subcontractor, its agents or employees, in the performance of the contract. The Contractor further agrees to indemnify and save harmless the Department of Transportation and its officers, agents, and employees from any claims or amounts recovered by any of the Contractor's employees under the Worker's Compensation Act.

Pursuant to N.C.G.S. 97-19, all Contractors of the Department of Transportation are, prior to beginning services, required to show proof of coverage issued by a Worker's Compensation Insurance Carrier, or a Certificate of Compliance issued by the Department of Insurance for self-insured Subcontractors stating that it has complied with N.C.G.S. 97-93 irrespective of whether Subcontractors have regularly in service fewer than three employees in the same business within the State of North Carolina, and Subcontractors shall be hereinafter liable under the Worker's Compensation Act for payment of compensation and other benefits to its employees for any injury or death due to an accident arising out of, and in the course of performance of the work by, the Subcontractor.

#### **VENDOR NUMBERS**

#### **ATTENTION CONTRACTORS:**

Effective immediately, NCDOT will begin tracking the work of <u>all</u> subcontractors including DBE/MB/WB subcontractors. When the bids are prepared, <u>all</u> subcontractors, their vendor number and other information must be shown on the "Listing of Subcontractors" sheet found in the bid package. Most subcontractors have already been assigned a vendor number by the Raleigh office. If the subcontractor does not have an NCDOT vendor number, he/she must complete a W-9 form and may submit it to:

North Carolina Department of Transportation, Division 6 - District 2, Post Office Box 1150,

Fayetteville, NC 28302.

Each time an invoice for payment is submitted to NCDOT, the prime contractor is required to submit a list of all subcontractors along with their vendor numbers that received payment the previous month from the prime contractor on the project. Also shown shall be the items of work they did and the amount paid to them the previous month and whether they were DBE/MB/WB. This list must be submitted along with the invoice in order for payment to be processed into the NCDOT accounting system. THE INVOICE CAN NOT BE PROCESSED NOR PAYMENT BE MADE UNTIL THIS INFORMATION IS SUBMITTED.

#### **FLAGGERS**

Furnish, relocate and maintain the flaggers, hats, vests, STOP/SLOW paddles and any other incidentals necessary to control traffic.

Refer to Roadway Standard Drawings No. 1150.01.

Provide the service of properly equipped and qualified flaggers (see *Roadway Standard Drawings* No. 1150.01) at locations and times for such period as necessary for the control and protection of vehicular and pedestrian traffic. Anyone who controls traffic is required to be qualified. Qualification consists of each flagger receiving proper training in the set-up and techniques of safely and competently performing a flagging operation. Qualification of flaggers is to be done by an NCDOT approved training agency or other approved training provider. For a complete listing of these, see the Work Zone Traffic Control's webpage. Prior to beginning work on the project, a Qualification Statement that all flaggers used on the project have been properly trained through an NCDOT approved training resource shall be provided to the Engineer.

Use flagging methods that comply with the guidelines in the MUTCD.

There shall be no direct payment for Flaggers as the use of Flaggers shall be considered incidental to the contractor's operations.

#### **DOMESTIC STEEL AND IRON PRODUCTS (Buy America)**

All steel and iron products which are permanently incorporated into this project shall be produced in the United States except minimal amounts of foreign steel and iron products may be used provided the combined project cost of the bid items involved does not exceed one-tenth of one percent (0.1 percent) of the total amount bid for the entire project or \$2,500.00, whichever is greater. This minimal amount of foreign produced steel and iron products permitted for use by this Special Provision is not applicable to fasteners. Domestically produced fasteners are required for this project.

All steel and iron products furnished as "domestic products" shall be melted, cast, formed, shaped, drawn, extruded, forged, fabricated, produced, or otherwise processed and manufactured in the United States. Raw materials including pig iron and processed pelletized and reduced iron ore used in manufacturing "domestic" steel products may be imported; however, all manufacturing processes to produce the products, including coatings, must occur in the United States.

Before each steel or iron product is incorporated into this project or included for partial payment on a monthly estimate, the Contractor shall furnish the Resident Engineer a notarized certification certifying that the product conforms to the above requirements of this Special Provision. The District Engineer will forward a copy of each certification to the Materials and Tests Unit.

Each purchase order issued by the Contractor or a subcontractor for steel and iron products to be permanently incorporated into this project shall contain in bold print a statement advising the supplier that all manufacturing processes to produce the steel or iron shall have occurred in the United States. The Contractor and all affected subcontractors shall maintain a separate file for steel products permanently incorporated into this project so that verification of the Contractor's efforts to purchase "domestic" steel and iron products can readily be verified by an authorized representative of the Department or the Federal Highway Administration.

#### SUPERVISION BY CONTRACTOR

At all times during the life of the project the Contractor shall provide one permanent employee who shall have the authority and capability for overall responsibility of the project and who shall be personally available at the work site within 24 hours notice. Such employee shall be fully authorized to conduct all business with the subcontractors, to negotiate and execute all supplemental agreements, and to execute the orders or directions of the Engineer. At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

The Contractor may, at his option, designate one employee to meet the requirements of both positions. However, whenever the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

#### LIABILITY INSURANCE

(11-18-08) SP1 G80

The Contractor shall be liable for any losses resulting from a breach of the terms of this contract. The Contractor shall be liable for any losses due to the negligence or willful misconduct of its agents, assigns and employees including any sub-contractors which causes damage to others for which the Department is found liable under the Torts Claims Act, or in the General Courts of Justice, provided the Department provides prompt notice to the Contractor and that the Contractor has an opportunity to defend against such claims. The Contractor shall not be responsible for punitive damages.

The Contractor shall at its sole cost and expense obtain and furnish to the Department an original standard ACORD form certificate of insurance evidencing commercial general liability with a limit for bodily injury and property damage in the amount of \$5,000,000.00 per occurrence and general aggregate, covering the Contractor from claims or damages for bodily injury, personal injury, or for property damages which may arise from operating under the contract by the employees and agents of the Contractor. The required limit of insurance may be obtained by a single general liability policy or the combination of a general liability and excess liability or umbrella policy. The State of North Carolina shall be named as an additional insured on this commercial general liability policy. The policy may contain the following language as relates to the State as an additional insured: "This insurance with respect to the additional insured applies only to the extent that the additional insured is held liable for your or your agent's acts or omissions arising out of and in the course of operations performed for the additional insured."

The Contractor shall maintain all legally required insurance coverage, including without limitation, worker's compensation and vehicle liability, in the amounts required by law. Providing and maintaining adequate insurance coverage is a material obligation of the contractor and is of the essence of this contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Contractor shall at all times comply with the terms of such insurance policies.

Upon execution of the contract, provide evidence of the above insurance requirements to the Engineer.

#### CONTRACT PAYMENT AND PERFORMANCE BOND

A performance bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with specifications and conditions of the contract is required for Construction contracts of \$500,000 or more. Such bond shall be solely for the protection of the North Carolina Department of Transportation and the State of North Carolina.

A payment bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the prompt payment for all labor or materials for which the Contractor, or his subcontractors, is liable is required for Construction contracts greater than \$500,000. The payment bond shall be solely for the protection of persons or firms furnishing materials or performing labor for this contract for which the Contractor is liable.

The successful bidder, within fourteen (14) days after notice of award, shall provide the Department with a contract payment bond and a contract performance bond each in an amount equal to 100 percent of the amount of the contract.

#### PARTIAL PAYMENT

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the <u>Standard Specifications</u>. The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period. All requests for payment shall be made on the form furnished to the Contractor by the Department of Transportation. The form shall be completely and legibly filled out with all appropriate information supplied and shall be signed by an authorized representative of the Contractor. Minority Business (MB) and Women's Business (WB) participation shall be listed in the appropriate spaces on all requests for payment. If there is no participation the word "None" or the figure "0" shall be entered.

The Contractor shall submit a completed DBE-1S form with every invoice. Invoices shall not be processed until the completed DBE-IS form has been received by the District Engineer or his/her representative.

#### CLAIMS FOR ADDITIONAL COMPENSATION OR EXTENSION OF TIME

Any claims for additional compensation and/or extensions of the completion date shall be submitted to the Division Engineer with detailed justification within thirty (30) days after receipt of the final invoice payment. The failure of the Contractor to submit the claim(s) within thirty days shall be a bar to recovery.

#### INVOICES FOR PAYMENT

The Contractor shall submit an invoice to the District Engineer for approval for payment. For any discrepancies noted on the invoice, the Contractor will be notified to submit a corrected copy before payment can be made (No errors or strike-thrus are permitted).

Scheduled estimate times will be determined by the District Engineer during the pre-construction conference. No invoices shall be accepted for payment at any time other than those scheduled, unless directed by the Engineer. For final invoice payment, a separate invoice will be submitted for any retainage due.

THE FINAL INVOICE SHALL BE RECEIVED IN THE DISTRICT ENGINEER'S OFFICE WITHIN ONE (1) WEEK OF THE COMPLETION DATE.

Invoices shall be submitted to:

Mr. Earl C.D. Locklear NCDOT – Division of Highways PO Box 1150 Fayetteville, NC 28306

#### **OUTSOURCING OUTSIDE THE USA**

(9-21-04) (5-16-06) SP1 G150

All work on consultant contracts, services contracts, and construction contracts shall be performed in the United States of America. No work shall be outsourced outside of the United States of America.

Outsourcing for the purpose of this provision is defined as the practice of subcontracting labor, work, services, staffing, or personnel to entities located outside of the United States.

The North Carolina Secretary of Transportation shall approve exceptions to this provision in writing.

#### MAINTENANCE OF THE PROJECT

(11-20-07) (Rev. 1-17-12) 104-10 SPI G125

Revise the 2012 Standard Specifications as follows:

Page 1-35, Article 104-10 Maintenance of the Project, line 25, add the following after the first sentence of the first paragraph:

All guardrail/guiderail within the project limits shall be included in this maintenance.

Page 1-35, Article 104-10 Maintenance of the Project, line 30, add the following as the last sentence of the first paragraph:

The Contractor shall perform weekly inspections of guardrail and guiderail and shall report damages to the Engineer on the same day of the weekly inspection. Where damaged guardrail or guiderail is repaired or replaced as a result of maintaining the project in accordance with this article, such repair or replacement shall be performed within 7 consecutive calendar days of such inspection report.

Page 1-35, Article 104-10 Maintenance of the Project, lines 42-44, replace the last sentence of the last paragraph with the following:

The Contractor will not be directly compensated for any maintenance operations necessary, except for maintenance of guardrail/guiderail, as this work will be considered incidental to the work covered by the various contract items. The provisions of Article 104-7, Extra Work, and Article 104-8, Compensation and Record Keeping will apply to authorized maintenance of guardrail/guiderail. Performance of weekly inspections of guardrail/guiderail, and the damage reports required as described above, will be considered to be an incidental part of the work being paid for by the various contract items.

#### TWELVE MONTH GUARANTEE

(7-15-03) 108 SP1 G145

- (A) The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the Department, and/or for use in excess of the design.
- (B) Where items of equipment or material carry a manufacturer's guarantee for any period in excess of twelve months, then the manufacturer's guarantee shall apply for that particular piece of equipment or material. The Department's first remedy shall be through the manufacturer although the Contractor is responsible for invoking the warranted repair work with the manufacturer. The Contractor's responsibility shall be limited to the term of the manufacturer's guarantee. NCDOT would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked only for major components of work in which the Contractor would be wholly responsible for under the terms of the contract. Examples would include pavement structures, bridge components, and sign structures. This provision will not be used as a mechanism to force the Contractor to return to the project to make repairs or perform additional work that the Department would normally compensate the Contractor for. In addition, routine maintenance activities (i.e. mowing grass, debris removal, ruts in earth shoulders,) are not parts of this guarantee.

Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project.

To ensure uniform application statewide the Division Engineer will forward details regarding the circumstances surrounding any proposed guarantee repairs to the Chief Engineer for review and approval prior to the work being performed.

#### **MATERIALS AND TESTING**

The Engineer reserves the right to perform all sampling and testing in accordance with Section 106 of the <u>Standard Specifications</u> and the Department's "Materials and Test Manual." However the Engineer may reduce the frequency of sampling and testing where he deems it appropriate for the project.

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the <u>Standard Specifications</u>. Material, which is not properly certified, will not be accepted.

#### INSPECTION

All work shall be subject to inspection by the Engineer at any time. Routinely, the Engineer will make periodic inspections of the completed work. It will be the responsibility of the Contractor to keep the Engineer informed of his proposed work plan and to submit written reports of work accomplished on a frequency to be determined by the Engineer.

#### **ENGINEERING CONTROL**

Engineering control and inspection will be by the North Carolina Department of Transportation. The Contractor will cut test samples as directed by the Engineer. The North Carolina Department of Transportation will set all necessary grades for pipe, ditches, or masonry drainage structures. All other field engineering will be the responsibility of the Contractor and considered as incidental to the project bid.

#### DEBARMENT STATEMENT

The Contractor certifies and understands that by his/her signature on the Bid Form that he/she and the contracting firm he/she represents has not been banned, debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

#### GIFTS FROM VENDORS AND CONTRACTORS

(12-15-09) SP1 G152

By Executive Order 24, issued by Governor Perdue, and *N.C. G.S.*§ 133-32, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

(1) have a contract with a governmental agency; or

(2) have performed under such a contract within the past year; or

(3) anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and G.S. § 133-32.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

#### INDEMNIFICATION

The Contractor shall defend, indemnify and hold harmless the North Carolina Department of Transportation, its officers and employees from any claim, demand, suit, liability, judgement and expense (including attorney's fees and other costs of litigation) arising out of or relating to injury, disease, or death of persons or damage to or loss of property resulting from or in connection with the negligent performance of this contract by the Contractor, its agents, employees, and subcontractors or any one for whom the Contractor may be responsible. The obligations, indemnities and liabilities assumed by the Contractor under this paragraph shall not extend to any liability caused by the negligence of the Department of Transportation or its employees. The Contractor's liability shall not be limited by any provisions or limits of insurance set forth in this contract.

The Contractor shall indemnify and hold harmless the Department of Transportation from any claim, demand, suit, liability, judgement, and expense involving damage or loss to the Contractor's equipment (including vandalism, theft, fire, and acts of God) arising out of or relating to work performed under this agreement. The obligations, indemnities and liabilities assumed by the Contractor under this paragraph shall not extend to any liability caused by the negligence of the Department of Transportation or its employees. The Contractor's liability shall not be limited by any provisions or limits of insurance set forth in this contract.

The Contractor further agrees to indemnify the Department of Transportation for any damages to the roadway, highway signs, highway equipment and other property owned or in possession of the Department of Transportation, brought about by reason of the negligent operation of the equipment. The Contractor further agrees to indemnify and save harmless the Department of Transportation, its officers and employees from any claims or amounts recovered by any of the Contractor's employees under the Workmen's Compensation Act.

#### CONTACTOR CLAIM SUBMITTAL FORM

(9-16-08) SP1 G140

If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted on the *Contractor Claim Submittal Form (CCSF)* available through the Construction Unit or <a href="http://ncdot.org/doh/operations/dp">http://ncdot.org/doh/operations/dp</a> chief <a href="http://ncdot.org/doh/operations/dp">eng/constructionunit/formsmanuals/</a>.

#### **AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS**

(5-20-08) Z-2

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c)*. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Article 108-13(E), of the *North Carolina Department of Transportation Standard Specifications for Roads and Structures*, dated July 1, 2012.

#### **DEFAULT OF CONTRACT**

The Department of Transportation shall have the right to declare default of contract for breach by the Contractor of any material term or condition of the contract. Default of contract shall be in accordance with the terms, conditions, and procedures of Article 108-9 of the <u>Standard Specifications</u>.

### **DIVISION CONTRACT**

## **Project Special Provisions**

#### NOTIFICATION OF OPERATIONS

The Contractor shall notify the Engineer <u>one week</u> in advance of beginning work on this project. The Contractor shall give the Engineer sufficient notice of all operations for any sampling, inspection or acceptance testing required.

#### INTERPRETATION OF QUANTITIES IN PROPOSAL FORM

The quantities appearing in the proposal form are approximate only and are to be used for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of the various items that are completed and accepted in accordance with the terms of the contract.

#### DRIVEWAYS AND PRIVATE PROPERTY

The Contractor shall maintain access to driveways for all residents and property owners throughout the life of the project. The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract. Any driveway cut or damaged by the contractor shall be repaired.

#### TRAFFIC SIGNS & MAILBOXES

Permanent traffic signs and mailboxes that interfere with the road construction operations are to be removed during the course of a day's work, and be reinstalled at the conclusion of each work day. The Contractor shall mark the proper location of the signs and mailboxes by placing an offset stake behind the ditch line to ensure proper replacement.

#### **EQUIPMENT**

The Contractor shall furnish all equipment in good operating condition and operated by properly trained and qualified personnel. The Contractor shall be responsible for all costs or charges incurred in the operation and maintenance of the equipment during the performance of this contract. Upon request, the contractor shall provide any and all state and federal certifications for equipment safety.

Payment for equipment and labor required to perform bid items is included in the bid item price provided by the contractor.

The Contractor shall be responsible for the equipment provided in this contract at all times and at all locations during the term of the contract. The Contractor shall have no claim against the Department of Transportation for any expense involving damage or loss to the Contractors equipment (including vandalism, theft, fire and acts of God, etc.) arising out of, or related to, work performed under this agreement.

#### **MOBILIZATION**

This work consists of preparatory work and operations, including but not limited to the movement of personnel, equipment, supplies, and incidentals to the project site, for the establishment of offices, buildings, and other facilities necessary for work on the project; the removal and disbandment of those personnel, equipment, supplies, incidentals, or other facilities that were established for the prosecution of work on the project; and for all other work and operations which must be performed for costs incurred prior to beginning work on the various items on the project site. Mobilization will be paid for per each notification for repair / installation.

Basis of payment.

Routine Functional Maintenance and Repair Mobilization, per each Emergency Non-Functional Mobilization, per each

#### **FUNCTIONAL MAINTENANCE REPAIR**

The Engineer will notify the Contractor when routine "functional" maintenance and repair of guardrail is required. When notified that routine "functional" maintenance and repair is needed, the Contractor shall respond and begin repairs on the designated section(s) within thirty (30) calendar days after notification. Compensation for responding to routine maintenance and repair of guardrail will be made at the contract bid price for "Routine Functional Maintenance and Repair Mobilization." Functional Routine Maintenance and Repair Mobilization will be paid for on a lump sum basis. A list of repairs will be provided to the contractor upon notification. The lump sum price agreed upon will be paid for each individual list provided by the engineer of functional maintenance repair mobilization.

#### NON-FUNCTIONAL MAINTENANCE REPAIR

When notified by the Engineer that non-functional emergency repairs are required, the Contractor shall respond and begin repairs of the designated section(s) within seven (7) calendar days after notification. Compensation for responding to non-functional emergency call back will be made at the contract bid price for "Non-functional Emergency Call Back Mobilization." Non-functional Emergency Call Back Mobilization will be paid for on a lump sum basis. A list of repairs will be provided to the contractor upon notification. The lump sum price agreed upon will be paid for each individual list provided by the engineer of a non-functional emergency call back.

#### STEEL BEAM GUARDRAIL

Steel beam guardrail shall be installed in accordance with Section 862, 863, 864, and 869 of the Standard Specifications and Roadway Standard Drawing 862.01, 862.02 and 862.03 Guardrail materials shall conform to Section 1046 of the Standard Specifications.

Rail elements shall be erected to produce a smooth continuous rail paralleling the line and grade of the highway surface or as shown on the plans. Rail elements shall be lapped in the direction of traffic.

Galvanized guardrail elements that have been scarred, scratched, or abraded shall be cleaned of all loose spelter coat and rust, and painted with two coats of zinc rich paint.

The Contractor shall not begin work on any section of guardrail until preparations have been made to complete the installation of the section, including posts, rail, and anchors, as a continuous operation. Once work has been initiated on a section, the work shall be prosecuted to its completion unless inclement weather or other conditions beyond the control of the Contractor interfere with the work. If the Contractor is unable to complete a section due to inclement weather or conditions beyond his control he shall take measures acceptable to the Engineer to provide warning and safety to motorists.

The Contractor shall dismantle and remove damaged and/or existing guardrail and all components; including concrete anchors, metal anchor sleeves, or anchor plates, at locations directed by the Engineer. The Contractor shall exercise care not to damage adjoining structures or other appurtenances. Any damage caused by the Contractor shall be repaired at no cost to the Department. All damaged guardrail and components which have been removed by the Contractor shall become the property of the Contractor and shall be disposed of in a timely manner.

There will be no direct payment for removing and disposing of damage and / or existing guardrail as this work shall be considered incidental to the work covered by this section.

The Contractor shall include the cost of removing and disposing of damaged and/or existing guardrail and components in the unit price bid for the various guardrail items included in this contract.

When guardrail installation and/or repairs are to be performed in an area where the Engineer has determined that a full lane closure is required, the Contractor shall provide a full lane closure in accordance with Std. 1101.02 of the <u>Standard Drawings</u>.

#### STEEL BEAM GUARDRAIL (continued)

Compensation for providing a full lane closure will be made at the contract bid price for "Traffic Control (Full Lane Closure Multi Lane)" or "Traffic Control (Full Lane Closure Two Lane)" and will be full compensation for all work covered by this section, including but not limited to furnishing, installing, maintaining, relocating and removing all signs, barricades, drums, cones, flashing arrow boards, message boards, truck mounted impact attenuators and all other traffic control devices required to safely perform the maintenance and/or repair work and protect the public. Traffic Control (Full Lane Closure Multi Lane) and/or Traffic Control (Full Lane Closure Two Lane) will be paid for on a per each basis. The per each price agreed upon will be paid for each day the Contractor is required provide a full lane closure

Posts shall be replaced in kind as those removed. Intermixing of wooden and steel posts will not be allowed except for end treatments placed on guardrail with steel posts.

The Contractor shall replace damaged guardrail end units and anchor units with the current NCDOT standard application.

The guardrail anchor units to be paid for will be the actual number of units which have been completed and accepted. No separate measurement will be made of any rail, terminal sections, posts, offset blocks, concrete, hardware, or any other components of the completed unit within the pay limits as shown on the plans as all such components will be considered to be part of the unit.

All bid items listed on the bid sheet shall include all necessary incidental hardware to complete the guardrail repairs. The Contractor shall take this into consideration when submitting the bid.

The Contractor shall furnish and install Bracket Type Guardrail Delineators (crystal or yellow) and Yellow Reflective Sheeting for End Delineation as directed by the Engineer. This work shall be in accordance with Std. 1261.01, Std. 1261.02 and Std. 1262.01 of the <u>Standard Drawings</u>. There will be no direct payment for furnishing and installing delineators and reflective sheeting as this work shall be considered incidental to the work covered by this section. The Contractor shall include the cost of furnishing and installing delineators and reflective sheeting in the unit bid price for the various guardrail items included in this contract.

Any work performed in an unsatisfactory manner could be a basis for cancellation of the contract. Any damage to adjacent shoulders, medians, paved areas, or other facilities shall be repaired or replaced by the Contractor to the satisfaction of the Engineer.

When practical, the Contractor shall reuse any functional part for repair as directed by the Engineer. Payment shall be made as "Re-hang End Unit" listed as a contingent bid item. Additional bolts, washers, and nuts necessary to perform the "Re-hang End Unit" will be paid for as "Guardrail Mounting Bolt, Washer, Nut".

Material must come from an approved producer who is on the NCDOT Brand Registration Program for Guardrail Materials. The current listing of approved guardrail producers can be found on the Department's Vendor System or the Department's Approved List at: http://apps.dot.state.nc.us/constructionunit/mttracking/

This registration will be valid for one year and a new Brand Registration and Guarantee is due by December 31<sup>st</sup> of each year. If a facility's brand registration is not received by December 31<sup>st</sup>, the facility will be removed from the Approved List.

#### STEEL BEAM GUARDRAIL (continued)

Each guardrail manufacturer will submit with the Brand Registration and Guarantee, a Marking Scheme Document which indicates how guardrail materials will be marked. As required by AASHTO M 180, Section 11.1, each beam element shall, at a minimum, be identified by the following: name or brand of manufacturer; identification symbols or code for heat number and coating lot; AASHTO specification number; and class and type. Of the identifiers listed above, the heat number is the most important. Through the use of the Department's HiCAMS system, all field inspection reports, materials received reports, and materials payments are tied back to the heat number of the rail. Without this link, the HiCAMS database cannot resolve materials discrepancies. Also, as required by AASHTO M 180, Section 11.2, the imprinted letters and numerals shall have a maximum height of 1-1/4" and a minimum height of 3/4" and shall be clearly legible after galvanization. Rail elements with markings not meeting these requirements will be subject to rejection by the Department.

As required by the Brand Registration Program, each shipment of guardrail must be accompanied by a matching Bill of Lading (BOL) listing the quantity of rail and complete anchor units contained within that shipment. This BOL must be delivered to Department personnel on the job site. One additional copy of the BOL shall be faxed to the appropriate Section Materials Specialist for the county in question. (A listing of the Unit's Section Materials Specialists, their phone & fax numbers and the counties they are responsible for is attached.) If the material is shipped directly to a project, then it is the manufacturer's responsible for is attached.) If the material is shipped to a contractor's distribution yard and then delivered to a project, the contractor is responsible for preparing a new Bill of Lading detailing only the items contained within that shipment. In the latter case, the contractor is responsible for faxing the BOL to the appropriate Section Materials Specialist. Additionally, the contractor's shipping documents must include the original Bill of Lading number used when the material was shipped from the manufacturer. Each BOL and other accompanying documents must have the Producer's Facility ID Number clearly shown. This number consists of the prefix "GR" and a number that identifies each facility on the Department's Approved List. (A listing of Producer Facility ID's is attached.) Finally, all BOLs and faxes must be legible before they are sent. If shipping documents are received that are not accurate or are not legible, the shipment will be subject to rejection. Failure to provide the appropriate paperwork prior to installation could result in rejection of the material and the possible removal of the producer from the Program. In the case of where the material is shipped from a contractor's distribution yard, failure to provide the appropriate paperwork could result in rejection of the material.

All steel posts and associated hardware should be identified by durable tags attached to each bundle that indicate the name of the producer and the location of the plant where it was produced.

#### **CABLE GUIDERAIL**

Cable Guiderail shall be installed in accordance with Section 865 of the <u>Standard Specifications</u> and Roadway Standard Drawing 865.01. Guardrail materials shall conform to Section 1046 of the <u>Standard Specifications</u>.

All concrete for cable guiderail anchor units shall be Class "A" meeting the requirements of Section 1000 if the <u>Standard Specifications.</u>

The Contractor shall dismantle, remove damaged, and/or reset existing components, at locations directed by the Engineer. The Contractor shall exercise care not to damage adjoining structures or other appurtenances. Any damage caused by the Contractor shall be repaired at no cost to the Department. All damaged guiderail and components that have been removed by the Contractor shall become property of the Contractor and shall be disposed of in a timely manner.

There will be no direct payment for the removing and disposing of damaged and/or existing guiderail as this work shall be considered incidental to the work covered by this section. The Contractor shall include the cost of removing and disposing damaged and/or existing guiderail and components in the unit price bid for the various guiderail items included in this contract. The Item "Cable Guiderail Posts" shall include the removal of damaged posts and replacing with new posts, attaching existing cable-rail, and all hardware needed to complete this work.

Posts replaced shall be of like kind as those removed.

Payment will be full compensation for all work covered by this provision including but not limited to erecting posts, cable, miscellaneous hardware, concrete and all incidentals necessary to complete this work.

When practical, the Contractor shall reuse any functional part for repair as directed by the Engineer.

Re-tensioning of cable guiderail shall be performed in accordance with standard drawing 865.01. At the Engineer's discretion, the Contractor shall receive written or verbal approval from the Engineer or his duly authorized representative prior to re-tensioning. The Engineer or his duly authorized representative shall be present to inspect the actual re-tensioning work. Failure of the Contractor to request and receive prior written or verbal approval for re-tensioning may result in non-payment of "Re-tensioning cable guiderail" for the location(s) in question and may require an on-site inspection and tension check by the contractor at no cost to the Department of Transportation.

Material must come from an approved producer who is on the NCDOT Brand Registration Program for Guiderail Materials. The current listing of approved guardrail producers can be found on the Department's Vendor System or the Department's Approved List at: http://apps.dot.state.nc.us/constructionunit/mttracking/

This registration will be valid for one year and a new Brand Registration and Guarantee is due by December 31<sup>st</sup> of each year. If a facility's brand registration is not received by December 31<sup>st</sup>, the facility will be removed from the Approved List.

The manufacturer must tag each reel of finished wire rope. The tag used must meet the requirements of AASHTO M 30, Section 10.1:

"Each reel shall have the length, nominal diameter, type of strand construction, mass of rope, and name or trademark of the manufacturer plainly and indelibly marked on a strong tag, firmly attached, or this information shall be painted on the reel."

Additionally, each reel tag must have a unique lot/serial number that ties the reel back to each of the heat numbers of the raw wire used to form the finished wire rope. As with steel beam rail, this traceability is critical to the acceptance of cable guiderail. The Engineer must be able to read the lot number of each reel and input that number into the Department's HiCAMS system to document materials receipts.

#### **CABLE GUIDERAIL (continued)**

Each shipment of cable guiderail must come with a complete and accurate Bill of Lading (BOL) listing every reel number within the shipment. This BOL must also indicate the heat number(s) of the raw material used for the reels within the shipment. This BOL must be delivered to Department personnel on the job site. One additional copy of the BOL shall be faxed to the appropriate Section Materials Specialist for the county in question. (A listing of the Unit's Section Materials Specialists, their phone & fax numbers and the counties they are responsible for is attached.) If the material is shipped directly to a project, then it is the manufacturer's responsibility to fax the BOL. If the material is shipped to a contractor's distribution yard and then delivered to a project, the contractor is responsible for preparing a new Bill of Lading detailing only the reels contained within that shipment. In the latter case, the contractor is responsible for faxing the BOL to the appropriate Section Materials Specialist. Additionally, the contractor's shipping documents must include the original Bill of Lading number used when the material was shipped from the manufacturer. If the installer is providing materials from different manufacturers he must submit the Bill of Lading information from each manufacturer. Each BOL and other accompanying documents must have the Producer's Facility ID Number clearly shown. This number consists of the prefix "GR" and a number that identifies each facility on the Department's Approved List. (A listing of Producer Facility ID's is attached.) Finally, all BOLs and faxes must be legible before they are sent. If shipping documents are received that are not accurate or are not legible, the shipment will be rejected. Failure to provide the appropriate paperwork prior to installation could result in rejection of the material and the possible removal of the producer from the Program. In the case of where the material is shipped from a contractor's distribution yard, failure to provide the appropriate paperwork could result in rejection of the material.

Each Bill of Lading should be accompanied by a Type 1 - Certified Mill Test Report indicating test results for samples taken from the same lot number(s) as the material actually shipped to the project.

Project samples of the cable will be taken by project technicians and submitted to the Materials and Tests Unit for testing at the following frequencies:

Cable: One  $30 \pm 6$  inch cable sample per each 80,000 linear feet or fraction thereof of cable used. (Note: this frequency equates to approximately 5 miles of installed 3-strand quiderail or approximately 40 reels of cable)

Field Splices:One splice sample per each 40 splices installed (Note: cable splice samples should have a minimum of 15" of cable on either side of the splice connector.)

Note: In the past, if the project engineer did not receive the proper paperwork prior to installation, cable guiderail could be accepted by taking one cable sample from every reel delivered to the project. With this memorandum, that practice will no longer be allowed. Again, failure to provide the appropriate paperwork prior to installation could result in rejection of the material and the possible removal of the producer from the Program.

All posts and associated hardware should be identified by durable tags attached to each bundle, that indicate the name of the producer and the location of the plant where it was produced. These items will be field inspected for galvanization by Materials and Tests personnel.

The precast concrete anchors used with cable guiderail should be pretested and stamped "NCDOT Approved" by Materials and Tests technicians prior to shipment from the producer's facility. However, if anchors are not stamped, Division Personnel will contact their local Section Materials Specialist immediately for inspection and approval of the anchors.

#### **GUARDRAIL ANCHOR UNITS**

As indicated above, Bills of Lading should also list quantities for each type of anchor unit in the shipment. The listing shown should indicate the actual brand name ("SKT-350", "ET-2000", "FLEAT", "REACT-350", etc.) and the original producer of the unit. Approvals from FHWA for NCHRP 350 units are given for individual brand name units and their original producers. The generic terms "Type 350" and "Type M-350", etc. are not sufficient to determine if the unit has been pre-approved and, therefore should not be used on BOLs. Also, names of wholesalers and galvanizers should not be used.

The majority of anchor units used by NCDOT are proprietary, meaning they have been tested and accepted as an entire unit under NCHRP 350 guidelines. All wood items used with proprietary anchor units must have the required preservative treatment and must be certified as such by the manufacturer. Because these items are accepted by certification, they will not be pre-inspected by an NCDOT-contract inspection company. Also, the FHWA approval dictates that all parts of the anchor unit come packaged together from the original producer. No intermingling of parts from different manufacturers will be allowed. The Department will not approve any 350 anchors which are not packaged and shipped as complete units.

Each 350-type unit shall have a permanent sticker attached indicating the brand name and producer of the unit and that it is NCHRP-350 compliant. All other anchor types and associated hardware should be identified by durable tags attached to each bundle, that indicate the name of the producer and the location of the plant where it was produced.

Guardrail end delineation should be used meeting the requirements of Section 1088-3 of the Standard Specifications. The retroreflective sheeting used should cover the entire impact face of the anchor unit.

For all of the items above, Brand Registration requires that records of all quality control tests and inspections performed by the producer be accessible to NCDOT and retained for a minimum of three years. Mill certifications are to be maintained by the producer at his facility for a minimum of five years. Copies of the mill certifications are not required with the guardrail shipment. NCDOT representatives will randomly conduct a minimum of one plant inspection per year per manufacturer with the cooperation and assistance of the manufacturer to insure that the Brand Registration and quality control requirements are met. Finally, the Brand Registration Program requires that the Registration and Guarantee document be signed by a responsible company representative and notarized, please note that a stamped signature from the representative is not considered binding for such documents.

#### **GUARDRAIL ANCHOR UNITS, TYPE 350**

(4-20-04) (Rev. 8-16-11) 862 SP8 R65

#### **Description**

Furnish and install guardrail anchor units in accordance with the details in the plans, the applicable requirements of Section 862 of the 2012 Standard Specifications, and at locations shown in the plans.

#### **Materials**

The Contractor may at his option, furnish any one of the guardrail anchor units or approved equal.

Guardrail anchor unit (ET-Plus) as manufactured by:

Trinity Industries, Inc. 2525 N. Stemmons Freeway Dallas, Texas 75207 Telephone: 800-644-7976

The guardrail anchor unit (SKT 350) as manufactured by:

Road Systems, Inc. 3616 Old Howard County Airport Big Spring, Texas 79720 Telephone: 915-263-2435

Prior to installation the Contractor shall submit to the Engineer:

- (A) FHWA acceptance letter for each guardrail anchor unit certifying it meets the requirements of NCHRP Report 350, Test Level 3, in accordance with Section 106-2 of the 2012 Standard Specifications.
- (B) Certified working drawings and assembling instructions from the manufacturer for each guardrail anchor unit in accordance with Section 105-2 of the 2012 Standard Specifications.

No modifications shall be made to the guardrail anchor unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

#### **Construction Methods**

Guardrail end delineation is required on all approach and trailing end sections for both temporary and permanent installations. Guardrail end delineation consists of yellow reflective sheeting applied to the entire end section of the guardrail in accordance with Section 1088-3 of the 2012 Standard Specifications and is incidental to the cost of the guardrail anchor unit.

Measurement and payment will be made in accordance with Articles 862-6 of the 2012 Standard Specifications.

Basis of payment:

Guardrail Anchor Units, Type 350, per each.

#### **GUARDRAIL ANCHOR UNITS, TYPE M-350**

(4-20-04) (Rev. 1-17-12) 862 SP8 R60

Furnish and install guardrail anchor units in accordance with the details in the plans, the applicable requirements of Section 862 of the 2012 Standard Specifications, and at locations shown in the plans.

#### **Materials**

The Contractor may, at his option, furnish any one of the following guardrail anchor units or approved equal.

The guardrail anchor unit (SRT-350) as manufactured by:

Trinity Industries, Inc. 2525 N. Stemmons Freeway Dallas, Texas 75207 Telephone: 800-644-7976

The guardrail anchor unit (FLEAT) as manufactured by:

Road Systems, Inc. 3616 Old Howard County Airport Big Springs, Texas 79720 Telephone: 915-263-2435

The guardrail anchor unit (REGENT) as manufactured by:

Energy Absorption Systems, Inc. One East Wacker Drive Chicago, Illinois 60601-2076 Telephone: 888-32-ENERGY

Prior to installation the Contractor shall submit to the Engineer:

- (A) FHWA acceptance letter for each guardrail anchor unit certifying it meets the requirements of NCHRP Report 350, Test Level 3, in accordance with Section 106-2 of the 2012 Standard Specifications.
- (B) Certified working drawings and assembling instructions from the manufacturer for each guardrail anchor unit in accordance with Section 105-2 of the 2012 Standard Specifications.

No modifications shall be made to the guardrail anchor unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

#### **Construction Methods**

Guardrail end delineation shall be required on all approach and trailing end sections for both temporary and permanent installations. Guardrail end delineation consists of yellow reflective sheeting applied to the entire end section of the guardrail in accordance with Section 1088-3 of the 2012 Standard Specifications and is incidental to the cost of the guardrail anchor unit.

Measurement and payment will be made in accordance with Article 862-6 of the 2012 Standard Specifications.

Basis of payment:

Guardrail Anchor Units, Type M-350, per each

#### **IMPACT ATTENUATOR UNITS, TYPE 350**

(4-20-04) (Rev 1-17-12) SP8 R75

#### **Description**

Furnish and install impact attenuator units and any components necessary to connect the impact attenuator units in accordance with the manufacturer's requirement, the details in the plans and at locations shown in the plans.

#### **Materials**

The Contractor may at his option, furnish any one of the **NON-GATING** impact attenuator units or approved equal:

The impact attenuator unit (QUADGUARD) as manufactured by:

Energy Absorption Systems, Inc. One East Wacker Drive Chicago, Illinois 60601-2076 Telephone: 312-467-6750

The impact attenuator unit (TRACC) as manufactured by:

Trinity Industries, Inc. 2525 N. Stemmons Freeway Dallas, Texas 75207 Telephone: 800-644-7976

The Contractor may at his option, furnish any one of the **GATING** impact attenuator units or approved equal:

The impact attenuator unit (BRAKEMASTER) as manufactured by:

Energy Absorption Systems, Inc. One East Wacker Drive Chicago, Illinois 60601-2076 Telephone: 312-467-6750

The impact attenuator unit (CAT) as manufactured by:

Trinity Industries, Inc. 2525 N. Stemmons Freeway Dallas, Texas 75207 Telephone: 800-644-7976

#### **IMPACT ATTENUATOR UNITS, TYPE 350 (continued)**

Prior to installation the Contractor shall submit to the Engineer:

- (A) FHWA acceptance letter for each impact attenuator unit certifying it meets the requirements of NCHRP Report 350, Test Level 3, in accordance with Article 106-2 of the 2012 Standard Specifications.
- (B) Certified working drawings and assembling instructions from the manufacturer for each impact attenuator unit in accordance with Article 105-2 of the 2012 Standard Specifications.

No modifications shall be made to the impact attenuator unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

#### **Construction Methods**

If the median width is 40 feet or less, the Contractor shall supply one of the NON-GATING Impact Attenuator Units listed in the Materials Section herein.

If the median width is greater than 40 feet, the Contractor may use any of the GATING or NON-GATING Impact Attenuator Units listed in the Materials Section herein.

#### **Measurement and Payment**

*Impact Attenuator Unit, Type 350* will be measured and paid at the contract unit price per each. Such prices and payment will be full compensation for all work covered by this provision including, but not limited to, furnishing, installing and all incidentals necessary to complete the work.

#### Basis of payment:

- 1. Impact Attenuator Units, Type 350, Gated, per each
- 2. Impact Attenuator Units, Type 350, Non-Gated, per each

#### **GUARDRAIL ANCHOR UNITS, TYPE III, MODIFIED FOR POST & BEAM RAIL**

Furnish and install guardrail anchor units in accordance with special detail included elsewhere within this contract proposal and the applicable requirements of Section 862 of the Standard Specifications. This unit is to be used only for bridges with post and beam type rail.

Basis of payment:

Guardrail Anchor Units, Type III Modified For Post & Beam Rail, per each.

#### 34-INCH X 4-INCH LINEAR DELINEATION SYSTEM PANELS

The Contractor is to provide 34-inch (36-inch) x 4-inch wide Linear Delineation System Panels for linear reflectorization of metal guardrails and other components. Linear delineation system panels are fabricated from reflective sheeting and are laminated onto a thin gauge aluminum and formed to a unique shape which provide retroreflection across a wide range of entrance and observation angles. The 4-inch panels are to be installed onto the guardrail in the trough (or "W") groove or as directed by the Engineer.

The Contractor shall install linear delineation system panels for day or night contrast a minimum of 18 inches between each panel into and around curves in accordance with special detail included elsewhere within this contract proposal and a maximum of 36 inches when running parallel with traffic or as directed by the Engineer. Spacing distances may vary depending upon configuration and construction of the guardrail. Where possible the Contractor shall avoid application over bolt heads and seams to ensure best possible adhesion to the guardrail surface.

When installing or re-installing the linear delineation system panel brackets directly to the guardrail surface, mark the guardrail properly for installation. Use a wire brush to clean surface dirt from application area. Lightly clean guardrail with rubbing alcohol or isopropyl alcohol. Allow alcohol to dry before application. The Contractor shall use three (3) 4-inch brackets per each panel. Use an approved adhesive system (epoxy) in order to attach the 4-inch bracket to the guardrail surface. Guardrails shall be dry, without rain in the forecast for at least eight (8) hours after the adhesive is applied for the linear delineation system installation. The Contractor shall be responsible for the durability and strength of the adhesive system used to mount the brackets and linear delineation systems to the guardrail surface.

The installation of Linear Delineation System Panels shall consist of the reflective sheeting, 3 - 4-inch aluminum brackets, adhesive systems, anchor bolts (if necessary) and other associated devices required to attach the panels to the guardrail. Re-installation of Linear Delineation System Panels shall consist of necessary adhesive systems, anchor bolts (if necessary) and other associated devices required to re-attach the panels to the guardrail.

In accordance with Section 862 of the Standard Specifications use yellow delineators in the median and on the left side of one-way ramps, loops or other one-way facilities. Use crystal delineators on the right side of divided highways, ramps, loops and all other one-way or two-way facilities. In all cases, the color of the delineator shall supplement the color of the adjacent edgelines.

No direct payment will be made for any items considered necessary for the installation/re-installation of the Linear Delineation System Panels as these items shall be considered incidental to the Linear Delineation System Panels.

#### NCDOT APPROVED TRAFFIC CONTROL DEVICE VENDOR(S)

CAROLINA TRAFFIC DEVICES, INC. PO BOX 38220 CHARLOTTE, NC 28278 (704) 588-7899

Basis of payment:

Installation of 34-inch x 4-inch Linear Delineation System Panel, (Fluorescent White or Fluorescent Yellow) per each,

Re-installation of 34-inch x 4-inch Linear Delineation System Panel, (Fluorescent White or Fluorescent Yellow) per each.

#### REMOVE AND STOCKPILE EXISTING GUARDRAIL

(7-1-95) (Rev. 7-18-06) SP8 R55

#### Description

Carefully dismantle and remove existing guardrail and all components, concrete anchors included, at locations indicated in the plans and neatly stockpile it on the right of way, with the small parts stored in sturdy containers, for removal by State Forces. Dispose of the concrete anchors.

#### **Measurement and Payment**

Remove and Stockpile Existing Guardrail will be measured and paid for will be the actual number of linear feet of guardrail that has been satisfactorily removed and stockpiled. Measurement will be made from center to center of the outermost post in the length of guardrail being removed. Measurement will be made prior to removing the guardrail. Such price and payment will be full compensation for dismantling, removing, stockpiling, disposal of the concrete anchors, and all other incidentals necessary to complete the work.

Basis of payment:

Remove and Stockpile Existing Guardrail, per linear foot

#### PLACING CONCRETE

Use Class "B" concrete unless otherwise directed by the Engineer. Do not place concrete until the foundation, the adequacy of the forms, the placing of reinforcement and other embedded items have been inspected and approved.\_Place concrete in daylight unless an approved lighting system is provided. Remove all debris from the interior of forms in preparation for placing concrete. Moisten earth or base course surfaces on which concrete is to be placed immediately before placing concrete. Do not place concrete on excessively wet or frozen surfaces. Place concrete in its final position in the forms within the time stipulated in Subarticle 1000-4(E). Place concrete so as to avoid segregation of the materials and the displacement of the reinforcement. Thoroughly work the concrete during placement. Bring mortar against the forms to produce a smooth finish, substantially free from water and air pockets or honeycombs. Do not place concrete when the air temperature, measured at the location of the concrete operation in the shade away from artificial heat, is below 35°F unless permission is otherwise granted. When such permission is granted, uniformly heat the aggregates and water to a temperature no higher than 150°F. Place the heated concrete at a temperature of not less than 55°F and not more than 80°F. The contractor shall supply the Engineer an approved concrete mix prior to beginning construction and the appropriate documentation for testing purposes at time of construction.

Use Class B concrete unless otherwise indicated on the plans. Concrete shall be of a North Carolina Department of Transportation approved mix design dispatched from a currently certified production facility. No concrete shall be placed until the forms and base have been inspected and approved by the Department of Transportation.

Payment at the contract prices for the various items covered by those sections of the Specifications directly applicable to the work being constructed will be full compensation for all work covered by this section. All concrete shall be considered incidental to the installation /maintenance of the Guardrail, Guiderail, Fence, and/or any associated appurtenances. There will be no direct payment for the work covered by this section.

#### TRAFFIC CONTROL AND WORK ZONE SAFETY

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, North Carolina Department of Transportation Standard Specifications for Roads and Structures 2012, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

Traffic movements through lane closures on roads with two way traffic shall be controlled by flaggers stationed at each end of the work zone. In situations where sight distance is limited, the Contractor shall provide additional means of controlling traffic, including, but not limited to, two-way radios, pilot vehicles, or additional flaggers. Flaggers shall be competent personnel, adequately trained in flagging procedures, and furnished with proper safety devices and equipment, including, but not limited to, safety vests and stop/slow paddles.

All personnel when working in traffic areas or areas in close proximity to traffic shall wear an approved safety vest, or shirt or jacket which meets the color requirements of the <u>Manual of Uniform Traffic Control Devices</u> (MUTCD).

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in subarticle 108-7(2) of the <u>Standard Specifications</u>.

All contractor personnel will be required to wear a Class II ANSI approved safety vest while working within the NCDOT Right of Way.

#### NCDOT WORK ZONE TRAFFIC CONTROL QUALIFICATIONS AND TRAINING PROGRAM

This program requires qualified and trained Work Zone Flaggers in every flagging operation (July 2010) and qualified and trained Work Zone Traffic Control Supervisors on Significant Projects (July 2011). It is intended for the program to include anyone working within NCDOT Right of Way including work associated with NCDOT construction and encroachment agreements as well as all NCDOT operations.

Training for this certification will be provided by NCDOT approved training sources and/or private entities that have been pre-approved to train themselves. Additional information will be provided as this program progresses. If you have questions, visit our web site at <a href="www.ncdot.org/~wztc">www.ncdot.org/~wztc</a>, or contact Stuart Bourne, PE with NCDOT Traffic Management Unit at (919) 662-4338 or <a href="mailto:sbourne@ncdot.gov">sbourne@ncdot.gov</a>.

#### TRAFFIC CONTROL

Maintain traffic in accordance with Divisions 10, 11 and 12 of the 2012 Standard Specifications and the following provisions:

Install Work Zone Advance Warning Signs in accordance with Standard Drawing No. 1101.01 of the 2012 Roadway Standard Drawings prior to beginning any other work. Use a lane closure or slow moving operation to complete the work, as necessary, unless otherwise indicated (refer to Standard Drawing No. 1101.02, 1101.11, 1110.01, 1110.02 and 1130.01 of the 2012 Roadway Standard Drawings. Use a moving operation only if the minimum speed maintained at all times is three (3) mph with no stops that narrow or close a lane of travel. If the moving operation is progressing slower than three (3) mph at any time, install a lane closure. Maintain the existing traffic pattern at all times, except in the immediate work zone where lane closures are allowed as determined by the Engineer.

Refer to attached details and Standard Drawing No. 1101.01, 1101.02, 1101.03, 1101.04, 1101.05, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, 1170.01 and 1180.01 of the 2012 Roadway Standard Drawings when closing a lane of travel in a stationary work zone such as pavement patching resurfacing, or pavement marking removal. Properly ballasted cones may be used instead of drums for lane closures during daylight hours. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of one (1) mile in length at any given time unless otherwise directed by the Engineer. A pilot vehicle operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material, which does not damage the sign sheeting. Replace any obliterated markings as required by other sections of the 2012 Standard Specifications and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to an undivided facility and within five (5) feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2012 Roadway Standard Drawings unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working on the shoulder, adjacent to a divided facility and within five (5) feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2012 Roadway Standard Drawings unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working within a lane of travel of an undivided or divided facility, close the lane according to the traffic control plans, 2012 Roadway Standard Drawings or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Do not perform work involving heavy equipment within fifteen (15) feet of the edge of travel way when work is being performed behind a lane closure on the opposite side of the travel way. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

When utilizing a slow-moving operation for such items as pavement marking placement, pavement marker installation and pesticide spraying, the slow moving operation caravan shall consist, as a minimum, of the vehicles and devices shown on the Moving Operation Caravan Details as shown on Standard Drawing No. 1101.02, sheets 11, 12 and 13 of the 2012 Roadway Standard Drawings. Traffic cones may be used when necessary to provide additional protection of wet pavement markings. Ballast all traffic cones so they will not be blown over by traffic.

Failure to comply with the following requirements will result in a suspension of all other operations:

- 1. Once the Contractor has started work at a location, the Contractor should prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance unless determined otherwise by the Engineer.
- 2. Obtain written approval of the Engineer before working in more than one location or setting up additional lane closures.

#### **TRAFFIC CONTROL (Continued)**

Maintain vehicular access in accordance with Article 1101-14 of the 2012 Standard Specifications.

Operate equipment and conduct operations in the same direction as the flow of traffic. Do not cross medians with equipment, except at properly designated interchanges.

Provide appropriate lighting in accordance with Section 1413 of the 2012 Standard Specifications.

Repair any pavement damage or shoulder damage due to guardrail/guiderail installation and/or maintenance prior to the departure from the work location. No direct payment will be made for this work, as it will be incidental to the guardrail/guiderail installation and/or maintenance operation.

Payment will be made for the traffic control items that have been included in the contract. No direct payment will be made for providing other traffic control as required herein, as the cost of same will be considered incidental to the work being paid for under those various traffic control items that have been included. Where the Contractor maintains traffic as required herein but no specific pay items have been included in the contract, all associated costs will be considered incidental to the work being paid for under the various items in the contract.

#### Basis of payment:

Traffic Control (Full Lane Closure – Multi Lane), per each, Traffic Control (Full Lane Closure – Two Lane), per each.

#### WORK ZONE SIGNING

Install and maintain signing in accordance with Divisions 11 and 12 of the 2012 Standard Specifications, the 2012 Roadway Standard Drawings and the following provisions:

Furnish, install, maintain and remove advance warning work zone signs and any required lane closure signing.

All work zone signs may be portable.

Install all warning work zone signs before beginning work on a particular location. If signs are installed three days prior to the beginning of work on a particular location, cover the signs until the work begins. Install each work zone warning sign separately and not on the same post or stand with any other sign except where an advisory speed plate or directional arrow is used.

Install advance warning work zone signs in accordance with Standard Drawing No. 1101.01, 1101.02 and 1110.01 of the 2012 Roadway Standard Drawings prior to beginning of work and remove upon final completion of the project. If there is a period of construction inactivity longer than two weeks, remove or cover advance warning work zone signs. Uncover advance warning work zone signs no more than three (3) days before work resumes. All other operations could be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

Install any required lane closure signing needed during the life of the project in accordance with the Standard Drawing No. 1101.02, 1101.11 and 1110.02 of the 2012 Roadway Standard Drawings.

Install general work zone warning signs at one (1) mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the Engineer.

Payment will be made for the work zone signing items that have been included in the contract. No direct payment will be made for providing other work zone signing as required herein, as the cost of same will be considered incidental to the work being paid for under those various work zone signing items that have been included. Where the Contractor provides work zone signing as required herein but no specific pay items have been included in the contract, all associated costs will be considered incidental to the work being paid for under the various items in the contract.

#### **MATERIALS**

(2-21-12) (Rev. 12-17-13)

1000, 1005, 1050, 1074, 1078, 1080, 1081, 1086, 1084, 1087,

SP10 R01

Revise the 2012 Standard Specifications as follows:

#### Page 10-1, Article 1000-1, DESCRIPTION, line 14, add the following:

Use materials which do not produce a mottled appearance through rusting or other staining of the finished concrete surface.

Page 10-5, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1000-1 REQUIREMENTS FOR CONCRETE												
of ite	Min. Comp. Strength at 28 days	Maxi	mum Wate	er-Cement	Ratio		sistency . Slump	Cement Content				
Class of Concrete		Air-Ent		Non Air-E Cond	Entrained crete	Vibrate d	Non- Vibrate d	Vib	rated	Non- Vibrated		
ច ប្ត	Min St	Rounded Aggregate	Angular Aggre-gate	Rounded Aggregate	Angular Aggre-gate	Vibr	N div	Min.	Max.	Min.	Max.	
Units	psi					inch	inch	lb/cy	lb/cy	lb/cy	lb/cy	
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	-	-	
AA Slip Form	4,500	0.381	0.426	-	-	1.5	-	639	715	-	-	
Drilled Pier	4,500	-	-	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	800	
А	3,000	0.488	0.532	0.550	0.594	3.5	4	564	-	602	-	
В	2,500	0.488	0.567	0.559	0.630	2.5	4	508	-	545	-	
B Slip Formed	2,500	0.488	0.567	-	-	1.5	-	508	-	-	-	
Sand Light- weight	4,500	-	0.420	-	-	4	-	715	-	-	-	
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-	-	-	
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flow-able	-	-	40	100	
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	-	Flow-able	-	-	100	as needed	
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	-	-	
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed	
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	-	564	as needed	-	-	

Page 10-65, Article 1050-1, GENERAL, line 41, replace the first sentence with:

All fencing material and accessories shall meet Section 106.

Page 10-23, Table 1005-1, AGGREGATE GRADATION-COARSE AGGREGATE, replace with the following:

	Light-c weight	ABC (M)	ABC	9	14M	78M	67	6M	57M	57	ΟΊ	467M	4	Std. Size #		
ı α α O α ≽	1		1	1	1	1	ı	1	1		1	100	100	2		
See Subarticle 1005-4(A). See Subarticle 1005-4(B). For Lightweight Aggregate used in Structural Concrete, see Subarticle 1014-2(E)(6).	1	100	100				ı	1	100	100	100	95- 100	90-	1/2"		
article 1 article 1 weight	1	75- 100	75- 97	1	1	ı	100	100	95- 100	95- 100	90-		20- 55	-		AGG
005-4(/ 005-4(F Aggrega	1	ı	,	1	1	100	90- 100	90 <u>-</u> 100	1	1	20- 55	35- 70	15	3/4"	Per	AGGREGATE
A). 3). ate use	100	45- 79	55- 80	1	1	98- 100	ı	20- 55	25- 45	25- 60	10 0		1	1/2"	centa	
d in Stru	80-	ı		100	100	75- 100	20- 55	0- 20		ı	0-5	о <sub></sub> -	0-5	3/8"	Percentage of	3RAD
uctural	5- 40	20- 40	35- 55	85- 100	35- 70	20- 45	0- 10	0-8	0- 10	10 10	ı	0-5	ı	#4	<sup>f</sup> Tota	ABLE
Concre	0- 20	ı		10- 40	5- 20	0- 15	0-5	ı	0-5	0-5	ı		ı	<b>#</b>	l by \	1000 C
te, see		0- 25	25- 45	ı	ı	ı		ı	ı		ı		ı	#10	Total by Weight Passing	5-1 OAR:
Subarti	10	ı	ı	10 10	0-8	ı	1	ı	ı		ı	ı	ı	#16	it Pas	SE AC
cle 101		ı	14- 30	ı	ı	ı	ı	ı	ı	•	ı		ı	#40	sing	)GRE
4-2(E)(6	2.5	0- 12 <sup>B</sup>	4- 12 <sup>B</sup>	Þ	➤	Α	>	>	A	>	>	>	A	#20 0		TABLE 1005-1 GRADATION - COARSE AGGREGATE
<b>)</b> )	AST	Maintenance Stabilization	Aggregate Base Course, Aggregate Stabilization	AST	Asphalt Plant Mix, AST, Weep Hole Drains, Str. Concrete	Asphalt Plant Mix, AST, Str. Conc, Weep Hole Drains	AST, Str. Concrete, Asphalt Plant Mix	AST	AST, Concrete Pavement	AST, Str. Concrete, Shoulder Drain, Sediment Control Stone	AST, Sediment Control Stone	Asphalt Plant Mix	Asphalt Plant Mix	Remarks		111

Page 10-115, Subarticle 1074-7(B), Gray Iron Castings, lines 10-11, replace with the first two sentences with the following:

Supply gray iron castings meeting all facets of AASHTO M 306 excluding proof load. Proof load testing will only be required for new casting designs during the design process, and conformance to M306 loading (40,000 lbs.) will be required only when noted on the design documents.

#### Page 10-126, Table 1078-1, REQUIREMENTS FOR CONCRETE, replace with the following:

TABLE 1078-1 REQUIREMENTS FOR CONCRETE							
Property	28 Day Design Compressive Strength 6,000 psi or less	28 Day Design Compressive Strength greater than 6,000 psi					
Maximum Water/Cementitious Material Ratio	0.45	0.40					
Maximum Slump without HRWR	3.5"	3.5"					
Maximum Slump with HRWR	8"	8"					
Air Content (upon discharge into forms)	5 + 2%	5 + 2%					

Page 10-151, Article 1080-4 Inspection and Sampling, lines 18-22, replace (B), (C) and (D) with the following:

- (B) At least 3 panels prepared as specified in 5.5.10 of AASHTO M 300, Bullet Hole Immersion Test.
- (C) At least 3 panels of 4"x6"x1/4" for the Elcometer Adhesion Pull Off Test, ASTM D4541.
- (D) A certified test report from an approved independent testing laboratory for the Salt Fog Resistance Test, Cyclic Weathering Resistance Test, and Bullet Hole Immersion Test as specified in AASHTO M 300.
- (E) A certified test report from an approved independent testing laboratory that the product has been tested for slip coefficient and meets AASHTO M253, Class B.

Page 10-161, Subarticle 1081-1(A) Classifications, lines 29-33, delete first 3 sentences of the description for Type 2 and replace with the following:

**Type 2 -** A low-modulus, general-purpose adhesive used in epoxy mortar repairs. It may be used to patch spalled, cracked or broken concrete where vibration, shock or expansion and contraction are expected.

Page 10-162, Subarticle 1081-1(A) Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A. Lines 16-22, delete Types 6A, 6B and 6C.

Page 10-162, Subarticle 1081-1(B) Requirements, lines 26-30, replace the second paragraph with the following:

For epoxy resin systems used for embedding dowel bars, threaded rods, rebar, anchor bolts and other fixtures in hardened concrete, the manufacturer shall submit test results showing that the bonding system will obtain 125% of the specified required yield strength of the fixture. Furnish certification that, for the particular bolt grade, diameter and embedment depth required, the anchor system will not fail by adhesive failure and that there is no movement of the anchor bolt. For certification and anchorage, use 3,000 psi as the minimum Portland cement concrete compressive strength used in this test. Use adhesives that meet Section 1081.

List the properties of the adhesive on the container and include density, minimum and maximum temperature application, setting time, shelf life, pot life, shear strength and compressive strength.

Page 10-163, Table 1081-1 Properties of Mixed Epoxy Resin Systems, replace table with the following:

Min. Bond Strength Slant 1,500 1,500 2,000 2,000 Shear Test at 14 days (psi)	Maximum Water Absorption 1.5 1.0 1.0 1.5 (%)	Min. Compressive Strength of 2" mortar cubes at 7 days (Neat)	Min. Compressive Strength of 2". mortar cubes at 24 hours (Neat) 4,000- 6,000 (Neat)	Tensile Elongation at 7 days 30 min. 30 min. 2-5 2-5 (%)	Minimum Tensile Strength at 1,500 2,000 4,000 4,000 7 days (psi)	Pot Life (Minutes) 20-50 30-60 20-50 5-50	Speed (RPM) - 20 20	Spindle No 3 4	Viscosity-Poises at 77°F ± 2°F Gel 10-30 25-75 Gel 4	Property Type 1 Type 2 Type 3 Type 3 3A	Properties of Mixed Epoxy Resin Systems
	1.5 1.0			2-5 5-15			10				esin Systems
1,500	1.0	5,000	3,000	5-15	1,500	40-80	10	4	40-150	Type 4B	
1,500	1.0	1	6,000	2-5	4,000	20-60	50	20	1-6	Type 5	

Page 10-164, Subarticle 1081-1(E) Prequalification, lines 31-33, replace the second sentence of the first paragraph with the following:

Manufacturers choosing to supply material for Department jobs must submit an application through the Value Management Unit with the following information for each type and brand name:

Page 10-164, Subarticle 1081-1(E)(3), line 37, replace this subarticle with the following:

(3) Type of the material in accordance with Articles 1081-1 and 1081-4,

Page 10-165, Subarticle 1081-1(E)(6), line 1, in the first sentence of the first paragraph replace "AASHTO M 237" with "the specifications".

Page 10-165, Subarticle 1081-1(E) Prequalification, line 9-10, delete the second sentence of the last paragraph.

Page 10-165, Subarticle 1081-1(F) Acceptance, line 14, in the first sentence of the first paragraph replace "Type 1" with "Type 3".

Page 10-169, Subarticle 1081-3(G) Anchor Bolt Adhesives, delete this subarticle.

Page 10-170, Article 1081-3 Hot Bitumen, line 9, add the following at the end of Section 1081:

#### 1081-4 EPOXY RESIN ADHESIVE FOR BONDING TRAFFIC MARKINGS

#### (A) General

This section covers epoxy resin adhesive for bonding traffic markers to pavement surfaces.

#### (B) Classification

The types of epoxies and their uses are as shown below:

**Type I –** Rapid Setting, High Viscosity, Epoxy Adhesive. This type of adhesive provides rapid adherence to traffic markers to the surface of pavement.

**Type II –** Standard Setting, High Viscosity, Epoxy Adhesive. This type of adhesive is recommended for adherence of traffic markers to pavement surfaces when rapid set is not required.

**Type III** – Rapid Setting, Low Viscosity, Water Resistant, Epoxy Adhesive. This type of rapid setting adhesive, due to its low viscosity, is appropriate only for use with embedded traffic markers.

Type IV – Standard Set Epoxy for Blade Deflecting-Type Plowable Markers.

#### (C) Requirements

Epoxies shall conform to the requirements set forth in AASHTO M 237.

#### (D) Prequalification

Refer to Subarticle 1081-1(E).

#### (E) Acceptance

Refer to Subarticle 1081-1(F).

Page 10-173, Article 1084-2 STEEL SHEET PILES, lines 37-38, replace first paragraph with the following:

Steel sheet piles detailed for permanent applications shall be hot rolled and meet ASTM A572 or ASTM A690 unless otherwise required by the plans. Steel sheet piles shall be coated as required by the plans. Galvanized sheet piles shall be coated in accordance with Section 1076. Metallized sheet piles shall be metallized in accordance to the Project Special Provision "Thermal Sprayed Coatings (Metallization)" with an 8 mil, 99.9% aluminum alloy coating and a 0.5 mil seal coating. Any portion of the metallized sheet piling encased in concrete shall receive a barrier coat. The barrier coat shall be an approved waterborne coating with a low-viscosity which readily absorbs into the pores of the aluminum thermal sprayed coating. The waterborne coating shall be applied at a spreading rate that results in a theoretical 1.5 mil dry film thickness. The manufacturer shall issue a letter of certification that the resin chemistry of the waterborne coating is compatible with the 99.9% aluminum thermal sprayed alloy and suitable for tidal water applications.

Page 10-174, Subarticle 1086-1(B)(1) Epoxy, lines 18-24, replace this subarticle with the following: The epoxy shall meet Article 1081-4.

The 2 types of epoxy adhesive which may be used are Type I, Rapid Setting, and Type II, Standard Setting. Use Type II when the pavement temperature is above 60°F or per the manufacturer's recommendations whichever is more stringent. Use Type I when the pavement temperature is between 50°F and 60°F or per the manufacturer's recommendations whichever is more stringent. Epoxy adhesive Type I, Cold Set, may be used to attach temporary pavement markers to the pavement surface when the pavement temperature is between 32°F and 50°F or per the manufacturer's recommendations whichever is more stringent.

Page 10-175, Subarticle 1086-2(E) Epoxy Adhesives, line 27, replace "Section 1081" with "Article 1081-4".

Page 10-177, Subarticle 1086-3(E) Epoxy Adhesives, line 22, replace "Section 1081" with "Article 1081-4".

Page 10-179, Subarticle 1087-4(A) Composition, lines 39-41, replace the third paragraph with the following:

All intermixed and drop-on glass beads shall not contain more than 75 ppm arsenic or 200 ppm lead.

Page 10-180, Subarticle 1087-4(B) Physical Characteristics, line 8, replace the second paragraph with the following:

All intermixed and drop-on glass beads shall comply with NCGS § 136-30.2 and 23 USC § 109(r).

Page 10-181, Subarticle 1087-7(A) Intermixed and Drop-on Glass Beads, line 24, add the following after the first paragraph:

Use X-ray Fluorescence for the normal sampling procedure for intermixed and drop-on beads, without crushing, to check for any levels of arsenic and lead. If any arsenic or lead is detected, the sample shall be crushed and repeat the test using X-ray Fluorescence. If the X-ray Fluorescence test shows more than a LOD of 5 ppm, test the beads using United States Environmental Protection Agency Method 6010B, 6010C or 3052 for no more than 75 ppm arsenic or 200 ppm lead.

Page 10-204, Subarticle 1092-2(A) Performance and Test Requirements, replace Table 1092-3 Minimum Coefficient of Retroreflection for NC Grade A with the following:

MIN	IMUM COEFFI (C	CIENT andela	OF RE	LE 109 TROR .ux Pe	<b>EFLE</b>	CTION are Me	FOR NC GRADE ter)	A
Observation Angle, degrees							Fluorescent Yellow	
0.2	-4.0	525	395	52	95	30	420	315
0.2	30.0	215	162	22	43	10	170	130
0.5	-4.0	310	230	31	56	18	245	185
0.5	30.0	135	100	14	27	6	110	81
1.0	-4.0	120	60	8	16	3.6	64	48
1.0	30.0	45	34	4.5	9	2	36	27

#### AWARD OF CONTRACT

The basis for award of this contract will be determined by multiplying the unit bid prices by the quantities given and comparing the total amount bid for the following items:

Routine Functional Maintenance and Repair Mobilization Emergency Non-functional Mobilization Steel Beam Guardrail, Single Faced (With Steel Posts)
Steel Beam Guardrail, Single Faced (With Weak Posts)
Steel Beam Guardrail, Single Faced (Rail Only)
Steel Beam Guardrail, Shop Curve (Varied Radii)
Steel Beam Guardrail, Double Faced (With Weak Posts)
Steel Beam Guardrail, Double Faced (Rail Only)
Additional Guardrail Steel Posts Additional Guardrail Weak Posts Additional Guardrail Posts and Blocks (Composite) Guardrail Anchor Units, Type III Modified for Post & Beam Rail Guardrail Anchor Units, Type CAT-1 Guardrail Anchor Units, Type 350 Guardrail Anchor Units, Type M-350 Guardrail Anchor Units, Type B-77 Additional Cable Guiderail Posts Reset Existing Single Faced Guardrail Reset Existing Double Faced Guardrail Re-Tensioning Cable Guiderail "J" Hooks for Cable Guiderail Structured Anchor Posts for Cable Guiderail Installation of 34" X 4" Linear Delineation Panel Re-Installation of 34" X 4" Linear Delineation Panel Additional Composite Blocks Woven wire Fence – 47" Fabric

4" Timber Fence Posts – 7'-6" Long

5" Timber Fence Posts – 8' Long

Chain Link Fence, 60" Fabric

Chain Link Fence, 48" Fabric

Metal Line Posts for 60" Chain Link Fence – 8' Long Metal Line Posts for 48" Chain Link Fence - 7' Long Metal Terminal Posts for 60" Chain Link Fence – 8' Long Metal Terminal Posts for 48" Chain Link Fence – 7' Long Tie-Rod – 0.375 Diameter with Turn Buckle Stretcher Band Bar Twisted Wire for Woven Wire Fence (#9 gage) Tension Wire for Chain Link Fence (#7 gage) Brace Rail for Chain Link Fence 3/16" x 3/4" Flat Stretcher Bar Traffic Control (Full Lane Closure – Multi Lane) Traffic Control (Full Lane Closure – Two Lane)

All other items are listed for contingent bids. The Contractor may be required to furnish and install these items if it is determined by the Engineer to be necessary. NOTE: Bids are required on all contingent items. Any proposals which do not have a bid for contingent items will be considered non-responsive and will not be considered for award of contract.

The quantities listed are for bidding purposes only. The actual quantities will be determined by the Engineer.

"The North Carolina Department of Transportation, in accordance with the provisions of *Title VI of the Civil Rights Act of 1964* (78 Stat. 252) and the Regulations of the Department of Transportation (49 C.F.R., Part 21), issued pursuant to such act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin".

### **DIVISION CONTRACT**

### **Standard Special Provisions**

#### NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

(5-17-11)

Z-3

Seed shall be sampled and tested by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory. When said samples are collected, the vendor shall supply an independent laboratory report for each lot to be tested. Results from seed so sampled shall be final. Seed not meeting the specifications shall be rejected by the Department of Transportation and shall not be delivered to North Carolina Department of Transportation warehouses. If seed has been delivered it shall be available for pickup and replacement at the supplier's expense.

Any re-labeling required by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory, that would cause the label to reflect as otherwise specified herein shall be rejected by the North Carolina Department of Transportation.

Seed shall be free from seeds of the noxious weeds Johnsongrass, Balloonvine, Jimsonweed, Witchweed, Itchgrass, Serrated Tussock, Showy Crotalaria, Smooth Crotalaria, Sicklepod, Sandbur, Wild Onion, and Wild Garlic. Seed shall not be labeled with the above weed species on the seed analysis label. Tolerances as applied by the Association of Official Seed Analysts will NOT be allowed for the above noxious weeds except for Wild Onion and Wild Garlic.

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the <u>found</u> pure seed and <u>found</u> germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

Restricted Noxious <u>Weed</u>	Limitations per Lb. Of Seed	Restricted Noxious <u>Weed</u>	Limitations per Lb. of Seed
Blessed Thistle	4 seeds	Cornflower (Ragged Robin)	27 seeds
Cocklebur	4 seeds	Texas Panicum	27 seeds
Spurred Anoda	4 seeds	Bracted Plantain	54 seeds
Velvetleaf	4 seeds	Buckhorn Plantain	54 seeds
Morning-glory	8 seeds	Broadleaf Dock	54 seeds
Corn Cockle	10 seeds	Curly Dock	54 seeds
Wild Radish	12 seeds	Dodder	54 seeds
Purple Nutsedge	27 seeds	Giant Foxtail	54 seeds
Yellow Nutsedge	27 seeds	Horsenettle	54 seeds
Canada Thistle	27 seeds	Quackgrass	54 seeds
Field Bindweed	27 seeds	Wild Mustard	54 seeds
Hedge Bindweed	27 seeds		

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed shall not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

Exceptions may be made for minimum pure live seed allowances when cases of seed variety shortages are verified. Pure live seed percentages will be applied in a verified shortage situation. Those purchase orders of deficient seed lots will be credited with the percentage that the seed is deficient.

#### FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

Minimum 85% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 83% pure live seed will not be approved.

Sericea Lespedeza Oats (seeds)

Minimum 80% pure live seed; maximum 1% total weed seed; maximum 2% total other crop; maximum 144 restricted noxious weed seed per pound. Seed less than 78% pure live seed will not be approved.

Tall Fescue (all approved varieties)
Kobe Lespedeza
Korean Lespedeza
Weeping Lovegrass
Carpetgrass

Bermudagrass Browntop Millet German Millet – Strain R Clover – Red/White/Crimson

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

#### Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties) Kentucky Bluegrass (all approved varieties) Hard Fescue (all approved varieties) Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass Crownvetch Pensacola Bahiagrass Creeping Red Fescue Japanese Millet Reed Canary Grass Zoysia

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Barnyard Grass
Big Bluestem
Little Bluestem
Bristly Locust
Birdsfoot Trefoil
Indiangrass
Orchardgrass
Switchgrass
Yellow Blossom Sweet Clover

#### **ERRATA**

(1-17-12) (Rev. 10-15-13) Z-4

Revise the 2012 Standard Specifications as follows:

#### Division 2

Page 2-7, line 31, Article 215-2 Construction Methods, replace "Article 107-26" with "Article 107-

Page 2-17, Article 226-3, Measurement and Payment, line 2, delete "pipe culverts,".

Page 2-20, Subarticle 230-4(B), Contractor Furnished Sources, change references as follows: Line 1, replace "(4) Buffer Zone" with "(c) Buffer Zone"; Line 12, replace "(5) Evaluation for Potential Wetlands and Endangered Species" with "(d) Evaluation for Potential Wetlands and Endangered Species"; and Line 33, replace "(6) Approval" with "(4) Approval".

#### Division 4

Page 4-77, line 27, Subarticle 452-3(C) Concrete Coping, replace "sheet pile" with "reinforcement".

#### Division 6

Page 6-7, line 31, Article 609-3 Field Verification of Mixture and Job Mix Formula Adjustments,

replace "30" with "45". Page 6-10, line **Page 6-10, line** "Subarticle 609-6(D)" 42, Subarticle 609-6(C)(2), replace "Subarticle 609-6(E)" with

Page 6-11, Table 609-1 Control Limits, replace "Max. Spec. Limit" for the Target Source of P<sub>0.075</sub>/P<sub>be</sub> Ratio with "1.0".

6-40, Article 650-2 Materials. replace "Subarticle 1012-1(F)" with Page "Subarticle 1012-1(E)"

#### Division 8

Page 8-23, line 10, Article 838-2 Materials, replace "Portland Cement Concrete, Class B" with "Portland Cement Concrete, Class A".

#### Division 10

Page 10-74, Table 1056-1 Geotextile Requirements, replace "50%" for the UV Stability (Retained Strength) of Type 5 geotextiles with "70%".

#### **Division 12**

Page 12-7, Table 1205-3, add "FOR THERMOPLASTIC" to the end of the title.

Page 12-8, Subarticle 1205-5(B), line 13, replace "Table 1205-2" with "Table 1205-4".

Page 12-8, Table 1205-4 and 1205-5, replace "THERMOPLASTIC" in the title of these tables with "POLYUREA".

Page 12-9, Subarticle 1205-6(B), line 21, replace "Table 1205-4" with "Table 1205-6". Page 12-11, Subarticle 1205-8(C), line 25, replace "Table 1205-5" with "Table 1205-7".

#### Division 15

Page 15-4, Subarticle 1505-3(F) Backfilling, line 26, replace "Subarticle 235-4(C)" with "Subarticle 235-3(C)'

Page 15-6, Subarticle 1510-3(B), after line 21, replace the allowable leakage formula with the following:  $W = LD\sqrt{P} + 148,000$ 

Page 15-6, Subarticle 1510-3(B), line 32, delete "may be performed concurrently or" and replace with "shall be performed"

Page 15-17, Subarticle 1540-3(E), line 27, delete "Type 1".

#### **Division 17**

Page 17-26, line 42, Subarticle 1731-3(D) Termination and Splicing within Interconnect Center, delete this subarticle.

Revise the 2012 Roadway Standard Drawings as follows:

**1633.01 Sheet 1 of 1, English Standard Drawing for Matting Installation,** replace "1633.01" with "1631.01".

#### PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)

(3-18-03) (Rev. 10-15-13)

Z-04a

#### Within Quarantined Area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

#### **Originating in a Quarantined County**

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

#### Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or <a href="http://www.ncagr.gov/plantind/">http://www.ncagr.gov/plantind/</a> to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

#### **Regulated Articles Include**

- 1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
- 2. Plants with roots including grass sod.
- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used ağricultural cultivating and harvesting equipment.
- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

#### MINIMUM WAGES

Z-5 (7-21-09)

The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE FEDERAL:

CENTS (\$7.25) per hour.

The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour. STATE:

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, Federal or State. It is the responsibility of the Contractor to keep fully informed of all Federal and State Laws affecting his contract.

## MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS)

(10-16-07)(Rev. 12-17-13) 102-15(J) SPI G67

#### Description

The purpose of this Special Provision is to carry out the North Carolina Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with State funds.

#### **Definitions**

Additional MBE/WBE Subcontractors - Any MBE/WBE submitted at the time of bid that will <u>not</u> be used to meet either the MBE or WBE goal. No submittal of a Letter of Intent is required.

Committed MBE/WBE Subcontractor - Any MBE/WBE submitted at the time of bid that is being used to meet either the MBE or WBE goal by submission of a Letter of Intent. Or any MBE or WBE used as a replacement for a previously committed MBE or WBE firm.

Contract Goals Requirement - The approved MBE and WBE participation at time of award, but not greater than the advertised contract goals for each.

Goal Confirmation Letter - Written documentation from the Department to the bidder confirming the Contractor's approved, committed MBE and WBE participation along with a listing of the committed MBE and WBE firms.

*Manufacturer* - A firm that operates or maintains a factory or establishment that produces on the premises, the materials or supplies obtained by the Contractor.

MBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed MBE subcontractor(s).

Minority Business Enterprise (MBE) - A firm certified as a Disadvantaged Minority-Owned Business Enterprise through the North Carolina Unified Certification Program.

Regular Dealer - A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns and operates distribution equipment for the products. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for MBE/WBE certification. The MBE/WBE program follows the same regulations as the federal Disadvantaged Business Enterprise (DBE) program in accordance with 49 CFR Part 26.

United States Department of Transportation (USDOT) - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

WBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed WBE subcontractor(s).

Women Business Enterprise (WBE) - A firm certified as a Disadvantaged Women-Owned Business Enterprise through the North Carolina Unified Certification Program.

#### Forms and Websites Referenced in this Provision

Payment Tracking System - On-line system in which the Contractor enters the payments made to MBE and WBE subcontractors who have performed work on the project. MBE https://apps.dot.state.nc.us/Vendor/PaymentTracking/

DBE-IS Subcontractor Payment Information - Form for reporting the payments made to all MBE/WBE firms working on the project. This form is for paper bid projects only. http://www.ncdot.org/doh/forms/files/DBE-IS.xls

RF-1 MBE/WBE Replacement Request Form - Form for replacing a committed MBE or WBE http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Request%20Form.pdf

SAF Subcontract Approval Form - Form required for approval to sublet the contract. http://connect.ncdot.gov/projects/construction/Construction%20Forms/Subcontract%20Approval%20 Form%20Rev.%202012.zip

JC-1 Joint Check Notification Form - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/Joint%20Check%20Notificatio n%20Form.pdf

Letter of Intent - Form signed by the Contractor and the MBE/WBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed MBE/WBE for the amount listed at the time of bid.

http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20 Subcontractor.pdf

Listing of MBE and WBE Subcontractors Form - Form for entering MBE/WBE subcontractors on a project that will meet this MBE and WBE goals. This form is for paper bids only. http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-

WBE%20Subcontractors%20(State).doc

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where MBEs and WBEs quoted on the project. This sheet is submitted with good faith effort packages.

http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20 Comparison%20Example.xls

#### MBE and WBE Goal

The following goals for participation by Minority Business Enterprises and Women Business Enterprises are established for this contract:

- (A) Minority Business Enterprises [0.0] %
  - If the MBE goal is more than zero, the Contractor shall exercise all necessary and (1) reasonable steps to ensure that MBEs participate in at least the percent of the contract as set forth above as the MBE goal.
  - (2)If the MBE goal is zero, the Contractor shall make an effort to recruit and use MBEs during the performance of the contract. Any MBE participation obtained shall be reported to the Department.
- Women Business Enterprises [0.0] % (B)
  - If the WBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that WBEs participate in at least the percent of the contract (1) as set forth above as the WBE goal.
  - (2)If the WBE goal is zero, the Contractor shall make an effort to recruit and use WBEs during the performance of the contract. Any WBE participation obtained shall be reported to the Department.

#### **Directory of Transportation Firms (Directory)**

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as MBE and WBE certified shall be used to meet the MBE and WBE goals respectively. The Directory can be found at the following link. https://partner.ncdot.gov/VendorDirectory/default.html

The listing of an individual firm in the directory shall not be construed as an endorsement of the firm's capability to perform certain work.

#### **Listing of MBE/WBE Subcontractors**

At the time of bid, bidders shall submit <u>all</u> MBE and WBE participation that they anticipate to use during the life of the contract. Only those identified to meet the MBE goal and the WBE goal will be considered committed, even though the listing shall include both committed MBE/WBE subcontractors and additional MBE/WBE subcontractors. Any additional MBE/WBE subcontractor participation submitted at the time of bid will be used toward overall race-neutral goals. Only those firms with current MBE and WBE certification at the time of bid opening will be acceptable for listing in the bidder's submittal of MBE and WBE participation. The Contractor shall indicate the following required information:

- (A) If either the MBE or WBE goal is more than zero,
  - (1) Bidders, at the time the bid proposal is submitted, shall submit a listing of MBE/WBE participation, including the names and addresses on *Listing of MBE and WBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the MBE and WBE participation for the contract.
  - (2) If bidders have no MBE or WBE participation, they shall indicate this on the *Listing of MBE and WBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety. **Blank forms will not be deemed to represent zero participation.** Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.
  - (3) The bidder shall be responsible for ensuring that the MBE/WBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that MBE's or WBE's participation will not count towards achieving the corresponding goal.
- (B) If either the MBE or WBE goal is zero, entries on the Listing of MBE and WBE Subcontractors are not required for the zero goal, however any MBE or WBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

#### **MBE or WBE Prime Contractor**

When a certified MBE or WBE firm bids on a contract that contains MBE and WBE goals, the firm is responsible for meeting the goals or making good faith efforts to meet the goals, just like any other bidder. In most cases, a MBE or WBE bidder on a contract will meet one of the goals by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the MBE or WBE bidder and any other similarly certified subcontractors will count toward the goal. The MBE or WBE bidder shall list itself along with any MBE or WBE subcontractors, if any, in order to receive credit toward the goals.

For example, on a proposed contract, the WBE goal is 10%, and the MBE goal is 8%. A WBE bidder puts in a bid where they will perform 40% of the contract work and have a WBE subcontractor which will perform another 5% of the work. Together the two WBE firms submit on the *Listing of MBE and WBE Subcontractors* a value of 45% of the contract which fulfills the WBE goal. The 8% MBE goal shall be obtained through MBE participation with MBE certified subcontractors or documented through a good faith effort. It should be noted that you cannot combine the two goals to meet an overall value. The two goals shall remain separate.

MBE/WBE prime contractors shall also follow Sections A or B listed under *Listing of MBE/WBE Subcontractors* just as a non-MBE/WBE bidder would.

#### Written Documentation – Letter of Intent

The bidder shall submit written documentation for each MBE/WBE that will be used to meet the MBE and WBE goals of the contract, indicating the bidder's commitment to use the MBE/WBE in the contract. This documentation shall be submitted on the Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed MBE and WBE to be used toward the MBE and WBE goals, or if the form is incomplete (i.e. both signatures are not present), the MBE/WBE participation will not count toward meeting the MBE/WBE goal. If the lack of this participation drops the commitment below either the MBE or WBE goal, the Contractor shall submit evidence of good faith efforts for the goal not met, completed in its entirety, to the Engineer no later than 12:00 noon of the eighth calendar day following opening of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

#### **Submission of Good Faith Effort**

If the bidder fails to meet or exceed either the MBE or the WBE goal, the apparent lowest responsive bidder shall submit to the Department documentation of adequate good faith efforts made to reach that specific goal(s).

One complete set and (No. of Copies) copies of this information shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Note: Where the information submitted includes repetitious solicitation letters, it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of MBE/WBE quotations shall be a part of the good faith effort submittal. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

#### Consideration of Good Faith Effort for Projects with MBE/WBE Goals More Than Zero

Adequate good faith efforts mean that the bidder took all necessary and reasonable steps to achieve the goal which, by their scope, intensity, and appropriateness, could reasonably be expected to obtain sufficient MBE/WBE participation. Adequate good faith efforts also mean that the bidder actively and aggressively sought MBE/WBE participation. Mere *pro forma* efforts are not considered good faith efforts.

The Department will consider the quality, quantity, and intensity of the different kinds of efforts a bidder has made. Listed below are examples of the types of actions a bidder will take in making a good faith effort to meet the goals and are not intended to be exclusive or exhaustive, nor is it intended to be a mandatory checklist.

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified MBEs/WBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the MBEs/WBEs to respond to the solicitation. Solicitation shall provide the opportunity to MBEs/WBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the MBEs/WBEs are interested by taking appropriate steps to follow up initial solicitations.
- (B) Selecting portions of the work to be performed by MBEs/WBEs in order to increase the likelihood that the MBE and WBE goals will be achieved.
  - (1) Where appropriate, break out contract work items into economically feasible units to facilitate MBE/WBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
  - (2) Negotiate with subcontractors to assume part of the responsibility to meet the contract MBE/WBE goals when the work to be sublet includes potential for MBE/WBE participation (2<sup>nd</sup> and 3<sup>rd</sup> tier subcontractors).
- (C) Providing interested MBEs/WBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D) (1) Negotiating in good faith with interested MBEs/WBEs. It is the bidder's responsibility to make a portion of the work available to MBE/WBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE/WBE subcontractors and suppliers, so as to facilitate MBE/WBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of MBEs/WBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for MBEs/WBEs to perform the work.
  - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE/WBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using MBEs/WBEs is not in itself sufficient reason for a bidder's failure to meet the contract MBE or WBE goals, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from MBEs/WBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting MBEs/WBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested MBEs/WBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
- (G) Making efforts to assist interested MBEs/WBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of MBEs/WBEs. Contact within 7 days from the bid opening NCDOT's Business Development Manager in the Business Opportunity and Work Force Development Unit to give notification of the bidder's inability to get MBE or WBE quotes.
- (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the MBE and WBE goal.

In addition, the Department may take into account the following:

- (1) Whether the bidder's documentation reflects a clear and realistic plan for achieving the MBE and WBE goals.
- (2) The bidders' past performance in meeting the MBE and WBE goals.
- (3) The performance of other bidders in meeting the MBE and WBE goals. For example, when the apparent successful bidder fails to meet the goals, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent successful bidder could have met the goals. If the apparent successful bidder fails to meet the MBE and WBE goals, but meets or exceeds the average MBE and WBE participation obtained by other bidders, the Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the Department that the MBE and WBE goals can be met or that an adequate good faith effort has been made to meet the MBE and WBE goals.

#### **Non-Good Faith Appeal**

The Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

#### **Counting MBE/WBE Participation Toward Meeting MBE/WBE Goals**

(A) Participation

The total dollar value of the participation by a committed MBE/WBE will be counted toward the contract goal requirements. The total dollar value of participation by a committed MBE/WBE will be based upon the value of work actually performed by the MBE/WBE and the actual payments to MBE/WBE firms by the Contractor.

(B) Joint Checks

Prior notification of joint check use shall be required when counting MBE/WBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1 (*Joint Check Notification Form*) and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

#### (C) Subcontracts (Non-Trucking)

A MBE/WBE may enter into subcontracts. Work that a MBE subcontracts to another MBE firm may be counted toward the MBE contract goal requirement. The same holds for work that a WBE subcontracts to another WBE firm. Work that a MBE subcontracts to a non-MBE firm does not count toward the MBE contract goal requirement. Again, the same holds true for the work that a WBE subcontracts to a non-WBE firm. If a MBE or WBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the MBE or WBE is not performing a commercially useful function. The MBE/WBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption may be subject to review by the Office of Inspector General, NCDOT.

#### (D) Joint Venture

When a MBE or WBE performs as a participant in a joint venture, the Contractor may count toward its contract goal requirement a portion of the total value of participation with the MBE or WBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the MBE or WBE performs with its forces.

#### (E) Suppliers

A contractor may count toward its MBE or WBE requirement 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from a MBE or WBE regular dealer and 100 percent of such expenditures from a MBE or WBE manufacturer.

(F) Manufacturers and Regular Dealers

A contractor may count toward its MBE or WBE requirement the following expenditures to MBE/WBE firms that are not manufacturers or regular dealers:

- (1) The fees or commissions charged by a MBE/WBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
- (2) With respect to materials or supplies purchased from a MBE/WBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

#### **Commercially Useful Function**

#### (A) MBE/WBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to MBEs and WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE/WBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a MBE/WBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the MBE/WBE credit claimed for its performance of the work, and any other relevant factors.

#### (B) MBE/WBE Utilization in Trucking

The following factors will be used to determine if a MBE or WBE trucking firm is performing a commercially useful function:

- (1) The MBE/WBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting the MBE or WBE goal.
- (2) The MBE/WBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The MBE/WBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) The MBE subcontract the work MBE may to another firm, an owner-operator who is certified as a MBE. The same holds true that a WBE may subcontract the work to another WBE firm, including an owner-operator who is certified as a WBE. When this occurs, the MBE or WBE who subcontracts work receives credit for the total value of the transportation services the subcontracted MBE or WBE provides on the contract. It should be noted that every effort shall be made by MBE and WBE contractors to subcontract to the same certification (i.e., MBEs to MBEs and WBEs to WBEs), in order to fulfill the goal requirement. This, however, may not always be possible due to the limitation of firms in the area. If the MBE or WBE firm shows a good faith effort has been made to reach out to similarly certified transportation service providers and there is no interest or availability, and they can get assistance from other certified providers, the Engineer will not hold the prime liable for meeting the goal.
- (5) The MBE/WBE may also subcontract the work to a non-MBE/WBE firm, including from an owner-operator. The MBE/WBE who subcontracts the work to a non-MBE/WBE is entitled to credit for the total value of transportation services provided by MBE/WBE subcontractor not to exceed the value of transportation services provided by MBE/WBE-owned trucks on the contract. Additional participation by non-MBE/WBE subcontractors receives credit only for the fee or commission it receives as a result of the subcontract arrangement. The value of services performed under subcontract agreements between the MBE/WBE and the Contractor will not count towards the MBE/WBE contract requirement.
- (6) A MBE/WBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the MBE/WBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the MBE/WBE, so long as the lease gives the MBE/WBE absolute priority for use of the leased truck. This type of lease may count toward the MBE/WBE's credit as long as the driver is under the MBE/WBE's payroll.

(7) Subcontracted/leased trucks shall display clearly on the dashboard the name of the MBE/WBE that they are subcontracted/leased to and their own company name if it is not identified on the truck itself. Magnetic door signs are not permitted.

#### MBE/WBE Replacement

When a Contractor has relied on a commitment to a MBE or WBE firm (or an approved substitute MBE or WBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another MBE/WBE subcontractor, a non-MBE/WBE subcontractor, or with the Contractor's own forces or those of an affiliate. A MBE/WBE may only be terminated after receiving the Engineer's written approval based upon a finding of good cause for the termination.

All requests for replacement of a committed MBE/WBE firm shall be submitted to the Engineer for approval on Form RF-1 (Replacement Request). If the Contractor fails to follow this procedure, the Contractor may be disqualified from further bidding for a period of up to 6 months.

The Contractor shall comply with the following for replacement of a committed MBE/WBE:

(A) Performance Related Replacement

When a committed MBE is terminated for good cause as stated above, an additional MBE that was submitted at the time of bid may be used to fulfill the MBE commitment. The same holds true if a committed WBE is terminated for good cause, an additional WBE that was submitted at the time of bid may be used to fulfill the WBE goal. A good faith effort will only be required for removing a committed MBE/WBE if there were no additional MBEs/WBEs submitted at the time of bid to cover the same amount of work as the MBE/WBE that was terminated.

If a replacement MBE/WBE is not found that can perform at least the same amount of work as the terminated MBE/WBE, the Contractor shall submit a good faith effort documenting the steps taken. Such documentation shall include, but not be limited to, the following:

- (1) Copies of written notification to MBEs/WBEs that their interest is solicited in contracting the work defaulted by the previous MBE/WBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with MBEs/WBEs for specific subbids including, at a minimum:
  - (a) The names, addresses, and telephone numbers of MBEs/WBEs who were contacted
  - (b) A description of the information provided to MBEs/WBEs regarding the plans and specifications for portions of the work to be performed.
- (3) A list of reasons why MBE/WBE quotes were not accepted.
- (4) Efforts made to assist the MBEs/WBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.
- (B) Decertification Replacement
  - (1) When a committed MBE/WBE is decertified by the Department after the SAF (Subcontract Approval Form) has been received by the Department, the Department will not require the Contractor to solicit replacement MBE/WBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.

(2) When a committed MBE/WBE is decertified prior to the Department receiving the SAF (Subcontract Approval Form) for the named MBE/WBE firm, the Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another similarly certified MBE/WBE subcontractor to perform at least the same amount of work to meet the MBE/WBE goal requirement. If a MBE/WBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

#### **Changes in the Work**

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed MBE/WBE, the Contractor will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a MBE/WBE based upon the Contractor's commitment, the MBE/WBE shall participate in additional work to the same extent as the MBE/WBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Contractor shall seek additional participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction, and a portion or all of the work had been expected to be performed by a committed MBE/WBE, the Contractor shall seek participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a MBE/WBE, the Contractor shall seek additional participation by MBEs/WBEs equal to the reduced MBE/WBE participation caused by the changes.

#### **Reports and Documentation**

A SAF (Subcontract Approval Form) shall be submitted for all work which is to be performed by a MBE/WBE subcontractor. The Department reserves the right to require copies of actual subcontract agreements involving MBE/WBE subcontractors.

When using transportation services to meet the contract commitment, the Contractor shall submit a proposed trucking plan in addition to the SAF. The plan shall be submitted prior to beginning construction on the project. The plan shall include the names of all trucking firms proposed for use, their certification type(s), the number of trucks owned by the firm, as well as the individual truck identification numbers, and the line item(s) being performed.

Within 30 calendar days of entering into an agreement with a MBE/WBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Contractor shall furnish the Engineer a copy of the agreement. The documentation shall also indicate the percentage (60% or 100%) of expenditures claimed for MBE/WBE credit.

#### **Reporting Minority and Women Business Enterprise Participation**

The Contractor shall provide the Engineer with an accounting of payments made to all MBE and WBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

- (A) Withholding of money due in the next partial pay estimate; or
- (B) Removal of an approved contractor from the prequalified bidders' list or the removal of other entities from the approved subcontractors list.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to MBEs/WBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from being approved for further work on future projects until the required information is submitted.

Contractors reporting transportation services provided by non-MBE/WBE lessees shall evaluate the value of services provided during the month of the reporting period only.

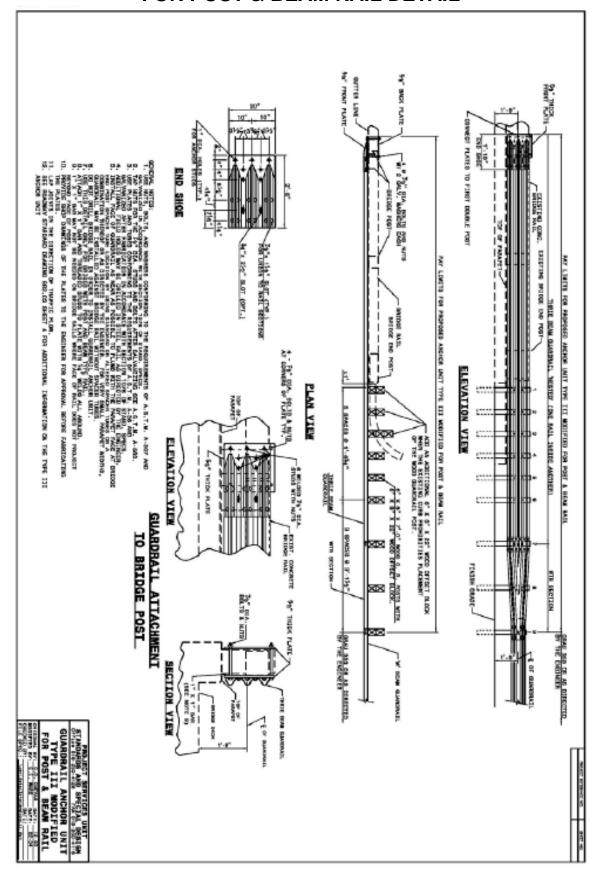
At any time, the Engineer can request written verification of subcontractor payments.

The Contractor shall report the accounting of payments on the Department's DBE-IS (Subcontractor Payment Information) with each invoice. Invoices will not be processed for payment until the DBE-IS is received.

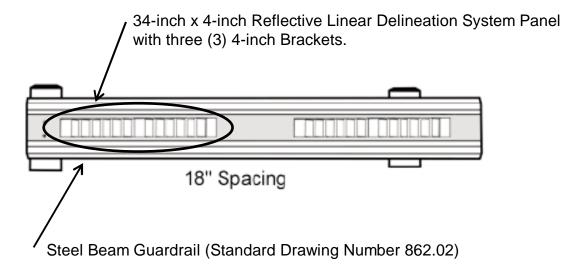
#### **Failure to Meet Contract Requirements**

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the 2012 Standard Specifications may be cause to disqualify the Contractor.

## GUARDRAIL ANCHOR UNITS, TYPE III MODIFIED FOR POST & BEAM RAIL DETAIL



#### 34-INCH X 4-INCH LINEAR DELINEATION SYSTEM PANELS DETAIL



18 inches spacing between each panel into and around curves and a maximum of 36 inches when running parallel with traffic or as directed by the Engineer. Spacing distances may vary depending upon configuration and construction of the guardrail.

#### CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

#### SIGNATURE OF CONTRACTOR

		Full nam	ne of Corp	poration
		Address	s as preq	ualified
Attest			Ву	
	Secretary/Assistant Secre Select appropriate title		_	President/Vice President/Assistant Vice President Select appropriate title
	Print or type Signer's na	me		Print or type Signer's name
				CORPORATE SEAL
	AF	FIDAVIT MU	JST BE	NOTARIZED
Subscribe	ed and sworn to before m	e this the		NOTARY SEAL
(	day of	_, 20		
	Signature of Notary F	Public		
Of	Oignature of Notary 1	_County		
State of _				
My Comm	nission Expires			

#### **PARTNERSHIP**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

#### SIGNATURE OF CONTRACTOR

Full Name of Partnership

. dii i da		
Address	as Prequalifi	ed
	Ву	
Signature of Witness	_ ,	Signature of Partner
Print or type Signer's name		Print or type Signer's name
AFFIDAVIT MU	IST BE NO	OTARIZED
Subscribed and sworn to before me this the		
day of 20		NOTARY SEAL
Signature of Notary Public	_	
ofCounty		
State of		
My Commission Expires:		

#### LIMITED LIABILITY COMPANY

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

#### SIGNATURE OF CONTRACTOR

		Full Name of Firm	
		Address as Prequalified	
		Signature of Manager	
Signatu	re of Witness		Individually
Print or typ	e Signer's name	_	Print or type Signer's Name
AFFIDAVIT MUST BE	NOTARIZED	NO	TARY SEAL
Subscribed and sworn to b	pefore me this the		
day of	20		
Signature of	Notary Public		
f	County		
State of			
My Commission Expires:			

#### JOINT VENTURE (2) or (3)

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

#### SIGNATURE OF CONTRACTOR

Instructions: 2 Joint Venturers Fill in lines (1), (2) and (3) and execute. 3 Joint Venturers Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1)				
(2)		Name of Joint Venture		
(2)		Name of Contractor		
		Address as prequalified	t	
•	Signature of Witness or Attest	Ву		Signature of Contractor
•	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal	and		
(3)				
		Name of Contractor		
•		Address as prequalified	b	
	Signature of Witness or Attest	Ву		Signature of Contractor
•	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal	and		
(4)				
		Name of Contractor (for 3 Joint Vo	enture only)	
•		Address as prequalified	b	
•	Signature of Witness or Attest	Ву		Signature of Contractor
	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal			
ARY SEAL		NOTARY SEAL		NOTARY
	pe notarized for Line (2)	Affidavit must be notarized for Line	. ,	Affidavit must be notarized for Line (4)
	d sworn to before me this 20	Subscribed and sworn to before mday of		Subscribed and sworn to before me thisday of20
	otary Public	Signature of Notary Public		Signature of Notary Public
	County	of	County	ofCou
	n Evniros:	State of My Commission Expires:		State of My Commission Expires:
ภาเกมรรเดิ	n Expires:	IVIY CONTINUSSION EXPIRES:		IVIY COMMISSION EXPIRES:

#### INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

### SIGNATURE OF CONTRACTOR Name of Contractor Individual name Trading and doing business as Full name of Firm Address as Prequalified Signature of Witness Signature of Contractor, Individually Print or type Signer's name Print or type Signer's name AFFIDAVIT MUST BE NOTARIZED Subscribed and sworn to before me this the **NOTARY SEAL** day of 20. Signature of Notary Public of County

State of \_\_\_\_\_

My Commission Expires:

#### INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

## SIGNATURE OF CONTRACTOR Name of Contractor Print or type Individual name Address as Prequalified Signature of Contractor, Individually Print or type Signer's Name Signature of Witness Print or type Signer's name AFFIDAVIT MUST BE NOTARIZED Subscribed and sworn to before me this the **NOTARY SEAL** Signature of Notary Public of \_\_\_\_\_County State of

My Commission Expires:

#### **DEBARMENT CERTIFICATION**

#### Conditions for certification:

- The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation that is file with the Department, or has become erroneous because of changed circumstances.
- 2. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
- 3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
- 4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR* 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.
- 5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
- 6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

#### **DEBARMENT CERTIFICATION**

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.

#### SUBSTITUTE FORM W-9

## VENDOR REGISTRATION FORM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Pursuant to Internal Revenue Service (IRS) Regulations, vendors must furnish their Taxpayer Identification Number (TIN) to the State. If this number is not provided, you may be subject to a 20% withholding on each payment. To avoid this 20% withholding and to insure that accurate tax information is reported to the Internal Revenue Service and the State, please use this form to provide the requested information exactly as it appears on file with the IRS.

INDIVIDUAL AND SOLE PROPRIETOR: ENTER NAME AS SHOWN ON SOCIAL SECURITY CARD

CORPORATION OR PARTNERSHIP : ENTER YOUR LEGAL BUSINESS NAME NAME: MAILING ADDRESS: STREET/PO BOX: CITY, STATE, ZIP: **DBA / TRADE NAME (IF APPLICABLE):** □INDIVIDUAL (use □SOLE PROPRIETER (use SS No. or Fed ID **BUSINESS DESIGNATION:** □PARTNERSHIP (use Federal ID No.) □CORPORATION (use Federal ID No.) □STATE OR LOCAL GOVT. (use Federal ID □ESTATE/TRUST (use Federal ID no.) No.) □OTHER / SPECIFY (Social Security #) **SOCIAL SECURITY NO.** OR (Employer Identification # FED.EMPLOYER IDENTIFICATION NO. COMPLETE THIS SECTION IF PAYMENTS ARE MADE TO AN ADDRESS OTHER THAN THE ONE LISTED ABOVE: REMIT TO ADDRESS: STREET / PO BOX: CITY, STATE, ZIP: Participation in this section is voluntary. You are not required to complete this section to become a registered vendor. The information below will in no way affect the vendor registration process and its sole purpose is to collect statistical data on those vendors doing business with NCDOT. If you choose to participate, circle the answer that best fits your firm's group definition. What is your firm's ethnicity? ( Prefer Not To Answer, African American, Native American, Caucasian American, Asian American, ☐ Hispanic American, ☐ Asian-Indian American, □Other: ) What is your firm's gender? (
Prefer Not to Answer, Male, Female)
Disabled-Owned Business? (
Prefer Not to Answer, Yes, No) IRS Certification Under penalties of perjury, I certify that: The number shown on this form is my correct taxpayer identification and I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the IRS that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and I am a U.S. person (including a U.S. resident alien). The IRS does not require your consent to any provision of this document other than the certifications required to avoid backup withholding. For complete certification instructions please see IRS FORM W-9 at http://www.irs.gov/pub/irspdf/fw9.pdf NAME (Print or Type) TITLE (Print or Type) SIGNATURE DATE PHONE NUMBER

To avoid payment delays, completed forms should be returned promptly to your local DOT office.

	County (ies)	
Contract Number C		

LISTING OF	- MBE	& WBE	OF MBE & WBE SUBCONTRACTORS	ORS	
				Sheet	_ of
FIRM NAME AND ADDRESS	MBE or WBE	ITEM NO.	ITEM DESCRIPTION	* AGREED UPON UNIT PRICE	** DOLLAR VOLUME OF ITEM
Contract No.		County		Firm	

This form must be completed in order for the Bid to be considered responsive and be publicly read.

Bidders with no MBE and/or WBE participation must so indicate this on the form by entering the word or number zero. only)

Rev 4-3-08 (format

Rev 4-3-08

LISTING OF	- MBE	& WBE	<b>NG OF MBE &amp; WBE SUBCONTRACTORS</b>	)RS	
				Sheet	_ of
FIRM NAME AND ADDRESS	MBE or WBE	NO.	ITEM DESCRIPTION	* AGREED UPON UNIT PRICE	** DOLLAR VOLUME OF ITEM
			** Dollar Volume of MBE Subcontractor	3E Subcontractor	\$
* The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the MBE and/or WBE subcontractor, and	ctual Price subcontrac	Agreed tor, and	MBE Percentage of Total Contract Bid Price	ontract Bid Price	%
these prices will be used to determine the percentage o WBE participation in the contract.	of the MBE	and/or	** Dollar Volume of WBE Subcontractor	3E Subcontractor	9
$^{**}$ Must have entry even if figure to be entered is zero.			WBE Percentage of Total Contract Bid Price	ontract Bid Price	

County (ies)

**Contract Number** 

This form must be completed in order for the Bid to be considered responsive and be publicly read. Bidders with no MBE and/or WBE participation must so indicate this on the form by entering the word or number zero. (format only)

# State of North Carolina Department of Transportation Subcontractor Payment Information

	Submit with Invoice To:	District Enginee North Carolina Division 6 / Dis P.O. Box 1150 Fayetteville, NO	Department of Tractions of Tractic 2	ransportation		
	Firm Invoice No. NC DOT PO / Contract Number WBS No. (State Project Date of Invoice					
Invoice Line Item Reference	Payer Name	Payer Federal Tax ld	Subcontractor/ Subconsultant/ Material Supplier Name	Subcontractor/ Subconsultant/ Material Supplier Federal Tax Id	Amount Paid To Subcontractor/ Subconsultant/ Material Supplier This Invoice	Date Paid To Subcontractor/ Subconsultant/ Material This Invoice
Certificatio	ocuments are scanned into the NCDOT In of Firm this information accurately reflects a pors/ Subconsultants/Material Supp	actual payments n	Total Am	nount Paid to Sub s the payments we		\$
	Signature			Title		
	Print Name			Date		
				- ·		



## North Carolina Department of Transportation DIVISION CONTRACT BID FORM

Work Order Number: 6.102640, 6.102620, 6.202611, 6.202621, 6.104340, 6.104320, 6.204311, &

6.204321

**State Road Number: Varies** 

**Cumberland and Harnett Counties** 

LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
10	0001020000-N	SP	Routine Functional Maintenance and Repair Mobilization	10	Each		
20	0001020000-N	SP	Emergency Non-Functional Mobilization	30	Each		
30	303000000-E	862	Steel Beam Guardrail, Single Faced (With Steel Posts)	1500	LF		
40	303000000-E	862	Steel Beam Guardrail, Single Faced (With Weak Posts)	500	LF		
50	303000000-E	862	Steel Beam Guardrail, Single Faced (Rail Only)	3000	LF		
60	3045000000-E	862	Steel Beam Guardrail, Shop Curve (Varied Radii)	150	LF		
70	3060000000-E	862	Steel Beam Guardrail, Double Faced (With Weak Posts)	1500	LF		
80	3060000000-E	862	Steel Beam Guardrail, Double Faced (Rail Only)	500	LF		
90	3150000000-N	862	Additional Guardrail Steel Posts	25	Each		
100	3150000000-N	862	Additional Guardrail Weak Posts	125	Each		
110	3150000000-E	862	Additional Guardrail Posts and Blocks (Composite)	30	Each		
120	3165000000-N	SP	Guardrail Anchor Unit, Type III, Modified For Post & Beam Rail	4	Each		
130	3210000000-N	862	Guardrail Anchor Units, Type CAT-1	10	Each		



## **DIVISION CONTRACT BID FORM (continued)**

LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
140	327000000-N	SP	Guardrail Anchor Units, Type 350	30	Each		
150	3285000000-N	SP	Guardrail Anchor Units, Type M-350	5	Each		
160	3317000000-N	862	Guardrail Anchor Units, Type B-77	4	Each		
170	3389500000-N	865	Additional Cable Guiderail Posts	125	Each		
180	3420000000-E	SP	Reset Existing Single Faced Guardrail	350	LF		
190	3420000000-E	SP	Reset Existing Double Faced Guardrail	150	LF		
200	3435000000-N	SP	Re-tensioning Cable Guiderail	20	Each		
210	3435000000-N	SP	"J" Hooks for Cable Guiderail	150	Each		
220	3435000000-N	SP	Structured Anchor Posts for Cable Guiderail	5	Each		
230	3435000000-N	SP	Installation of 34" X 4" Linear Delineation Panel	400	Each		
240	3435000000-N	SP	Re-Installation of 34" X 4" Linear Delineation Panel	25	Each		
250	3436000000-N	862	Additional Composite Blocks	80	Each		
260	350300000-E	866	Woven Wire Fence – 47" Fabric	1000	LF		
270	3509000000-E	866	4" Timber Fence Posts – 7'-6" Long	50	Each		
280	3515000000-E	866	5" Timber Fence Posts – 8' long	10	Each		



## **DIVISION CONTRACT BID FORM (continued)**

LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
290	3533000000-E	866	Chain Link Fence, 60" Fabric	500	LF		
300	3536000000-E	866	Chain Link Fence, 48" Fabric	300	LF		
310	353900000-E	866	Metal Line Posts for 60" Chain Link Fence – 8' Long	10	Each		
320	3542000000-E	866	Metal Line Posts for 48" Fabric – 7' Long	20	Each		
330	3545000000-E	866	Metal Terminal Posts for 60" Chain Link Fence – 8' Long	5	Each		
340	3548000000-E	866	Metal Terminal Posts for 48" Fabric – 7' Long	5	Each		
350	3579000000-N	866	Tie Rod – 0.375 Diameter with Turn Buckle	5	Each		
360	3579000000-N	866	Stretcher Band Bar	5	Each		
370	3580000000-E	866	Twisted Wire for Woven Wire Fence (#9 gage)	100	LF		
380	3580000000-E	866	Tension Wire for Chain Link Fence (#7 gage)	1000	LF		
390	3580000000-E	866	Brace Rail for Chain Link Fence	25	LF		
400	3580000000-E	866	3/16" x ¾" Flat Stretcher Bar	10	LF		
410	460000000-N	SP	Traffic Control (Full Lane Closure – Multi Lane)	50	Each		
420	4600000000-N	SP	Traffic Control (Full Lane Closure – Two Lane)	10	Each		

The Contractor shall note that the above mentioned quantities are used <u>only</u> for determining the low responsible bidder.

### TOTAL BID FOR PROJECT :

NOTE: Bids are required on all contingent items. Any proposals which do not have a bid for contingent items will be considered non-responsive and will not be considered for award of contract



LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
430	300000000-N	SP	Type CAT-350 Gated Impact Attenuator Unit	1	Each		
440	300000000-N	SP	Type CAT-350 Non-Gated Impact Attenuator Unit	1	Each		
450	3075000000-E	862	Triple Corrugated Steel Beam Guardrail	1	LF		
460	3090000000-N	862	Typical End Shoe (Std. 862.03) for Triple Corrugated Guardrail	1	Each		
470	3105000000-N	862	Terminal End Section	1	Each		
480	3105000000-N	862	Typical End Shoe (Std. 862.02) for Steel Beam Guardrail	1	Each		
490	3135000000-N	862	W-TR Steel Beam Guardrail Transition Section	1	Each		
500	3150000000-N	862	Additional Guardrail Wooden Posts	1	Each		
510	3150000000-N	862	Additional Guardrail Weakened Wood Posts (6'-0")	1	Each		
520	3150000000-N	862	Thrie Beam Line Post (7'-0")	1	Each		



LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
530	3150000000-N	862	Thrie Beam Line Post (6'-0")	1	Each		
540	3150000000-N	862	WTR Beam Line Post (6'-0")	1	Each		
550	3195000000-N	862	Guardrail Anchor Units, Type AT-1	1	Each		
560	3215000000-N	862	Guardrail Anchor Units, Type	1	Each		
570	3319000000-N	862	Guardrail Anchor Units, Type B-83	1	Each		
580	3345000000-E	864	Remove and Reset Existing Guardrail	1	LF		
590	3347000000-E	864	Remove and Reset Existing Guiderail	1	LF		
600	3360000000-E	863	Remove Existing Guardrail	1	LF		
610	3365000000-E	863	Remove Existing Guiderail	1	LF		
620	3375000000-E	SP	Remove and Stockpile Existing Guardrail	1	LF		
630	3389200000-E	865	Cable Guiderail	1	LF		
640	3389400000-E	865	Double Faced Cable Guiderail	1	LF		
650	3389600000-N	865	Cable Guiderail Anchor Units	1	Each		
660	3421000000-E	862	Guardrail with Pre-punched Holes for Cable Assembly (Rail Only)	1	LF		
670	3435000000-N	SP	Cable Guiderail Splices	1	Each		



LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
680	3435000000-N	SP	Reset Cable Guiderail Anchor Units	1	Each		
690	3435000000-N	SP	Reset Cable Guiderail Anchor Units Spring Cable End Assembly (Compensating)	1	Each		
700	3435000000-N	SP	Guardrail Mounting Assembly (Bolt, Washer and Nut)	1	Each		
710	3435000000-N	SP	Rehang End Unit	1	Each		
720	3436000000-N	862	Additional Guardrail Posts and Blocks	1	Each		
730	3436000000-N	862	Additional Steel Blocks	1	Each		
740	3436000000-N	862	Additional Wooden Blocks	1	Each		
750	3436000000-N	862	Thrie Beam Offset Block - Wooden	1	Each		
760	3436000000-N	862	WTR Beam Offset Block - Wooden	1	Each		
770	3436000000-N	862	Breakaway Anchor Angle	1	Each		
780	3436000000-N	862	Buffer End Section (only) for CAT-1 and AT-1 Anchor Units	1	Each		
790	3436000000-N	862	Guardrail Structure Post	1	Each		
800	3436000000-N	862	5/8" Diameter X 26" Post Bolt, Nut, Washer	1	Each		
810	3436000000-N	862	5/8" Diameter X 3" Splice Bolt & Nut (For Nested W-Beam)	1	Each		
820	3436000000-N	862	Guardrail Anchor Assembly	1	Each		



LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
830	3506000000-E	866	4" Timber Fence Posts – 6' Long	1	Each		
840	3512000000-E	866	5" Timber Fence Posts – 6' Long	1	Each		
850	3533000000-E	866	Chain Link Fence, 72" Fabric	1	LF		
860	3533000000-E	866	Chain Link Fence, 84" Fabric	1	LF		
870	3539000000-E	866	Metal Line Posts for 72" Chain Link Fence – 9' Long	1	Each		
880	353900000-E	866	Metal Line Posts for 84" Chain Link Fence – 10' Long	1	Each		
890	3545000000-E	866	Metal Terminal Posts for 72" Chain Link Fence – 9' Long	1	Each		
900	3545000000-E	866	Metal Terminal Posts for 84" Chain Link Fence – 10' Long	1	Each		
910	3557000000-E	866	Additional Barb Wire	1	LF		
920	3559000000-E	866	4 Point Barbed Wire Fence with Posts	1	LF		
930	3566000000-E	867	Woven Wire Fence Reset	1	LF		
940	3569000000-E	867	Barbed Wire Fence Reset	1	LF		
950	3572000000-E	867	Chain Link Fence Reset	1	LF		



LINE	ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
960	3579000000-N	866	4" x 4" Horizontal Top Brace for Woven Wire or Barbed Wire Fence	1	Each		
970	3579000000-N	866	Galvanized Caps for Chain Link Posts	1	Each		
980	3579000000-N	866	Barbed Wire Arms	1	Each		
990	3579000000-N	866	Top Rail for Chain Link Fence	1	Each		
1000	3595000000-E	869	Re-lapping Guardrail	1	LF		

CONTRACTOR		
ADDRESS		
Federal Identification Number	Contractors License Number	
Authorized Agent	Title	
Signature	Date	
Witness	Title	
Signature	Date	
	ETED BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION ith Article 103-1 of the Standard Specifications for Roads and Structures 2006.	
Reviewed by	(date)	
Accepted by NCDOT	(date)	
Division E	ngineer	